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Seeking Believability in Consumption

An Exploration of Women’s Responses to the Concept of Weight Management Foods

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A thesis submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy in Marketing, University of Auckland, 2016
Abstract

Consumer health and wellness decisions in contemporary western societies have become increasingly complex and individualised. Considerable consumer research exists for functional foods, a category of manufactured foods making added health and wellness claims due to their fortification with health giving compounds. Given that the consumption outcome is often uncertain, and can require credence, believability judgements are arguably an important part of the response. But, how do consumers make such judgements? What might influence them? This research addresses this knowledge gap within the context of women’s weight loss activities, and explores how consumers make sense of a functional food product concept, which claims to enhance hunger control for longer. The research aims to gain insight into the way in which women seeking weight loss make their believability judgements, and why they make them. A constructivist, interpretivist approach was taken in three empirical studies, using a qualitatively dominant, mixed method methodology. Combined, the findings revealed that most women held uncertain believability responses, reserving judgement due to a lack of confirmatory evidence. However, although cognitive counter-arguments were developed, the women were simultaneously interested in trying the foods. Implicated in the responses was an overshadowing scepticism for the weight loss industry which coincided with the emotionally driven hope of not wanting to miss out on advancement towards weight loss goals, due to underlying weight/body image motivations. Diversity in the judgement was revealed to be due to the influences of identity construction, perceived self-control challenges, and biases to believe motivated by goal importance. Themes of compatibility, control, and personal confirmation were revealed as key components of the judgement. In this context, it is concluded that believability is a personal, temporal, and multi-dimensional judgement. Implications for marketers looking to launch such foods are provided, including proposals to move beyond existing weight loss appeals to better resonate with women seeking weight loss. By identifying the motivational nature of believability judgments, the findings contribute to understanding of what believability means to consumers, and why it is an important construct for further research.
Acknowledgments

A project such as this could not have happened without the support of the team who worked directly on it, and those behind the scenes. I was fortunate to have the assistance of two exceptional supervisors. Sincere thanks to my principal supervisor Dr Denise Conroy, and my co-supervisor Dr Sara Jaeger for their guidance. The experience was always positive and I valued their patience, generosity and constructive approach.

Special thanks to Professor Margo Buchanan-Oliver for providing a research culture for the Marketing Department that aims for excellence, and for her encouragement and opportunities for further teaching experience. Grateful thanks to Professor Rod Brodie, Professor Peter Danaher, and Dr Rick Starr Jr for their considered input. Thanks also to Dr Catherine Frethey-Bentham for help with recruitment. To my fellow University of Auckland PhD cohort; thanks and good luck. Additionally, thanks to Dr Roger Harker and the Plant and Food Sensory team for their interest and encouragement. I am most appreciative of the financial support provided by the University of Auckland Doctoral Scholarship, and the New Zealand Institute for Plant and Food Research for their research stipend. Additionally, the University of Auckland Business School Research and Conference funding, assisted me greatly.

This thesis would not be complete without acknowledging those behind the scenes. I thank my family, Sheila, David, Sam & Nick for their ongoing and wonderful support. Thanks also to my friends Claire, Josette, Gerry, Rachel and Teri for the encouragement to keep going. Importantly, I acknowledge the research participants, particularly those who spoke frankly and openly in the interviews, and who made the research possible. Thanks lastly, to my personal assistant, Rodney, for canine dedication throughout.

This research was conducted in association with The New Zealand Institute for Plant and Food Research Ltd (PFR). PFR is a New Zealand Crown Research Institute which provides research and development to add value to fruit, vegetable, crop and food products by developing uses for highly valuable health compounds. Funding for the fieldwork for Study 1 was provided by PFR.
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Chapter One: INTRODUCTION

1.1 Background

The past thirty years have witnessed unprecedented changes in food consumption in developed western societies (Sobal & Bisogni, 2009; Sobal, Bisogni & Jastran, 2014). Considerable choice exists to satisfy diverse food requirements including foods which offer added health and wellness benefits (Grunert, 2013). However, given abstract, changing and sometimes conflicting health information from manufacturers, the media, the internet, and public health sources, it is not surprising that confusion about what to eat to be healthy is reportedly increasing (Grunert, 2013; International Food Information Council, 2012; O’Key & Hugh-Jones, 2010; Rogers & Gould, 2015; Williams & Ghosh, 2008). For consumers, in the absence of clear societal guidelines, this complex and diverse marketplace has brought adjustment, uncertainty, and even anxiety (Kristensen, Askegaard & Jeppesen, 2013; Niva, 2007).

This research concerns consumer decision-making for foods (and beverages) which make health and wellness claims, called functional foods (Siro, Kapolna, Kapolna, & Lugasi, 2008; Urala & Lahteenmaki, 2007). Functional foods were launched to offer consumers specific health benefits over and above the nutritional value of the food. For example, margarine fortified with polyphenols to lower blood pressure, and probiotic yoghurts for enhanced digestive health, are successful market entrants. However, global acceptance of the functional food category as a whole has been mixed amidst consumer trends for naturally sourced health benefits, organic foods, and concerns over the perceived risks of food processing (Grunert, 2010; Mellentin, 2014; Siro et al., 2008). This research uses one specific functional food exemplar, weight management foods, to explore new aspects of the consumer response to them, that is, believability judgements.

1.2 Research Problem Identification

Although much has been learnt about consumer attitudes to functional foods both in general, and in terms of their specific health and wellness claims (Grunert, Scholderer & Rogeaux, 2011; Rogeaux, 2010; Siro et al., 2008), surprisingly few studies have considered whether consumers believe that the functional claims will work for them, personally. This is despite
reported scepticism for food products making health claims (Naylor, Droms & Haws, 2009; Tan & Tan 2007). One particular characteristic of health properties in food, and hence the claims of functional foods, is their requirement for credence (Grunert, 2002), which occurs where claims are complex to assess, and benefits are difficult to verify even after immediate consumption (Darby & Karni 1973). For example, Bhakasaran & Hardley (2002), found consumers bought functional margarines and yoghurts from a hope that the benefits would work for them, rather than any firm belief that they do.

This thesis argues that consumer believability judgment, as a nuanced personal construct referencing personal beliefs, is a relevant and important part of the consumer response. However, in reviewing the existing marketing and consumer behaviour literature, although the concept of ‘believability’ is previously utilised as a quantitative measure, few studies have qualitatively explored how consumers themselves make believability judgements, and the concept has not previously been studied in functional food contexts. The research responds to calls to provide further insight into aspects of personal meaning (Lahteenmaki, 2013), motivational biases (Mason & Scammon, 2011), and scepticism (Naylor, et al., 2009) for health and wellness claims.

1.3 Research Purpose

The overall research purpose is to assess consumer believability as an appropriate construct for insight into the cognitive, emotional, and behavioural aspects of functional food response. To this end, the research seeks to account for what constitutes believability for consumers, and the strategies they use to make their judgements. In one context, using an exploratory, consumer centric meaning based perspective, the research aims to understand whether consumers believe the proposed concept will work for them. It considers how, and why, they make such judgements.

1.4 Research Context - Women’s Weight Loss Activities

The research addresses the knowledge gap by exploring the judgements of women for the concept of weight management functional foods. The weight management foods, herein termed ‘the proposed foods’, claim to offer easier control over eating due to their enhanced
satiety, that is, the sustained feeling of fullness after an eating occasion. Having greater control over one’s hunger is seen as an important way of helping consumers with their weight loss (Hetherington et al., 2013). The weight loss activities context is a developing and significant area in which to study consumption behaviour. However few studies have attempted to understand consumer attitudes to products and activities. Gaining a better understanding of the complexities that consumers face in decision making in this context, will augment existing product attribute focused approaches, and allow better resonance with potential consumers.

Arnould, Price & Moisio (2006) advocate the use of consumption contexts of significance in people’s lives to allow complex and paradoxical interactions between constructs to surface. Women’s weight loss activities constitute a rich context for gaining insight into the potentially emotionally driven process of judging a functional food. The socio cultural and marketplace meanings of weight management activities make consumption choices a complex and emotional issue. Women, the predominant gender who engage in weight loss activities, face tensions between societal pressures to achieve weight loss for varied health and appearance motivations, and the immediate temptations of the food rich marketplace (Beruchasvili, Moisio & Gentry, 2013; St James, Handelman & Taylor, 2011; Whale, Gillison, & Smith, 2014). The research reflects the views of women who were potential members of the target audience for the proposed concept.

1.5 Research Importance

Conducting the research was important for several reasons. Foods with added health and wellness benefits are seen as a means of adding value to consumers (Grunert, 2010). However, the way consumers regard their health, wellness and/or wellbeing is changing, and references not only their physical concerns, but also emotional, intellectual, social, and spiritual elements of their lives (King et al, 2015). Increased understanding of the consumer perspective towards such foods, therefore, provides guidance for the development and personalisation of future foods to assist consumers in more meaningful ways. For the proposed weight management case, consumer research to date has confirmed that consumers in general understand the functional benefits of satiety, and the need for personal responsibility in their weight loss activities (Bilman, van Kleef, Mela, Hulshof, & van Trijp, 2012). However, little research has focused on the way in which consumers make sense of
the benefit, despite concerns over the possible misinterpretation of satiety benefits by more vulnerable consumers (Booth & Nouwen, 2010). Deeper consumer investigation is warranted, given that the concept has not previously been qualitatively researched, is potentially confusing, and may lead to consumer overestimation (Booth & Nouwen, 2010; Van Kleef, vanTrijp, van den Borne & Zondervan, 2012).

Overconsumption continues to receive considerable attention across multiple disciplines. Overweightness and obesity are increasingly prevalent, serious health and wellness conditions, with an annual global economic impact estimated to be $US2 trillion (Dobbs et al., 2014). As reported by the World Health Organisation (2014), the conditions are leading risk factors in global deaths from diabetes type 2 and heart disease, and are implicated in other health issues which affect life enjoyment, such as osteoarthritis and joint pain. Being overweight has an impact on many facets of overall health and life enjoyment, with powerful social and cultural norms existing around body size and appearance (Lewis & Leitch, 2015; Whale, et al., 2014). Over one third of all adults are now technically termed overweight, and Australia and New Zealand are both in the higher bracket of affected countries (Ng et al., 2013; Pirsch, Grau & Polonsky, 2013; Swinburn, Sacks, Hall, McPherson, Finegood, Modie & Gortmaker, 2011). Given that weight loss activities are undertaken in an environment where advice and activities continually change, compete, and conflict, exploration into the everyday practices of consumers is an important dimension of the research effort seeking to understand and assist consumers to attain healthier lives.

1.6 Overview of Theoretical Concepts

1.6.1 Defining Consumer Believability
The central phenomenon of interest for the study is consumer believability judgement. Under the constructivist assumptions of this thesis, ‘consumer believability’ is viewed as the subjective judgement of whether a consumer believes that a product will work for himself/herself according to its promised benefits. As distinct from the related construct of credibility, which largely attends to the source elements of a communication (Rieh & Danielson, 2007), consumer believability is aligned to the concept of holding an outcome expectancy, which is viewed as a fundamental aspect of human decision making (Bandura 1977; Feather, 1982; Oliver & Winer, 1987). Insofar as the literature indicates belief formation to be personally
derived using both cognitive and emotional components (Abelson, 1979; Frijda, Manstead & Bem, 2000), making a believability judgement about a potential health concept of relevance is likely to hold inherent personal meaning for an individual. For the research, the established Appraisal Theory framework (Frijda, 1986; Johnson & Stewart, 2005; Lazarus, 1991a, 1991b) provides theoretical explanation of cognitive dimensions which relate to uncertain outcomes and elicit differing emotions such as hope. It helps explain why people respond differently to the same situation/information.

However, believability as a construct has proved to be both ubiquitous and elusive. Believability is not a new concept within the marketing and consumer behaviour literature. It has received a fair amount of empirical attention, as a quantitative measure in advertising message and public health contexts (Atkin & Beltramini, 2007; Beltramini, 2006; Beltramini & Brown, 1994; Beltramini Evans, & Stan, 2000; Bruner, Hensel & James, 2001), as well as a future indicator of market potential in new product concept research (Moskowitz, Porresetta & Silcher, 2007). However few definitions are available in the literature and the term “consumer believability” is not widely used or theoretically established. Current understanding was found to be limited and driven by researcher and marketer constructions of what constitutes believability. This is despite evidence of motivated biases in consumer responses associated with personal goals and desired behaviours (Andrews, Netemeyer & Durvasula, 1991; Jones & Rossiter, 2004; Mason & Scammon, 2011; Naylor, et al., 2009), and individual differences in the way credibility assessments are evaluated by the receiver of the information (Delia, 1976; Rich & Danielson, 2007).

1.6.2 The Theoretical Approach

In approaching the research, the strategy of cross fertilising ideas from a variety of core topics across theoretical and methodological perspectives was used (Arnould & Thompson, 2005; Peracchio, Luce & McGill, 2014). The research makes linkages between believability judgements and established theories from the psychology and consumer behaviour literature to attempt to explore how the judgements are made, and what influences them. The influences of emotions and future anticipations about personal outcomes underlie much of the impetus for new product consumption (Bagozzi & Lee, 1999; Wood & Moreux, 2006;), and food consumption (Canetti, Bachar & Berry 2002). Numerous studies have led to the understanding that consumption behaviour is driven by not only cognitive evaluations of the
attributes and quality of a product or service, but also motivational influences (Bagozzi & Edwards, 2000; Bagozzi & Warshaw 1990; Holbrook & Hirschman, 1982; Pham, 2013), personal and social identity (Reed, Forehand, Puntoni, & Warlop, 2012; Tajfel and Turner, 1979), and consumer self-control perceptions (Baumeister, 2002; Ottes, Ruth & Crosby, 2014). The main conceptual areas of the research are depicted in Figure 1.

*Figure 1: Overview of the Research*

Figure 1 depicts the overarching conceptual areas of the research, showing the interconnected and prevailing role of socio-cultural life context forces, and cognitive and emotional sense-making components on the judgement. The responses are studied as appraisals of significance, where the cognitive rationalising about the benefits is interlinked with responses interpreted to involve varying degrees of hope and scepticism. Hope has been theorized to influence motivations, attitudes, and behaviours, and to motivate reasoning and bias cognition for important personal goals (Kunda, 1990; MacInnis & de Mello, 2005). It is a construct of importance in health care (Kemp, Min & Joint, 2015), and studies of women and weight loss
activities (Beruchashvili et al., 2013; St James et al., 2011). Consumer believability is revealed in the research to be identified with notions of compatibility, perceptions of control, and personal confirmation.

1.7 Research Aims and Questions

The present enquiry aimed to uncover the ways in which women seeking weight loss made believability judgements for the proposed concept, and to understand what influenced this response. Because the identified knowledge gap for the phenomenon of interest was not well defined, and prior research was limited in scope, the research enquiry used a descriptive and exploratory approach. Three research questions were developed to guide the research process. The first question was designed to explore the extent to which the women judged the concept to be believable to them, and to understand the way in which they made sense of their judgements, given their daily food routines and weight loss practices. It asked:

RQ.1: How do women, seeking weight loss, judge whether they believe the weight management concept will work for them?

The second question was more specific and sought to understand the possible role of consumer believability judgement in future intentions towards the foods. It asked:

RQ.2: How are the believability judgements linked with behavioural intentions to try the foods?

The third question enquired into the varied influences on the judgements using established consumer theories of motivation, identity and appraisal. It asked

RQ.3: What influences the women’s believability judgements?

The development of the research questions is justified in more detail in Chapter 3, and sub-research questions for each of the three empirical studies are stated within the relevant chapters, along with their linkages to the above overarching questions.
1.8 Overview of Methodological Approach

Because the purpose of research was to gain meaning-based consumer insight, the research employed a constructivist epistemology and used an interpretive approach. The empirical research for the thesis consisted of three empirical studies in an exploratory, qualitatively dominant, mixed methods design. Each study was independent and focused on aspects of the believability judgements within the boundaries of the weight loss activities context. An initial on-line survey (Study 1) was conducted to reveal initial benchmark indications of the response to the proposed foods concept and to scope for areas for further exploration. To uncover a richer discourse about consumers’ sense-making given lived experiences and perspectives, Study 2 used the qualitative method of in-depth, individual interviews. A third study was undertaken using a repertory grid technique (Kelly, 1955). It was designed to clarify how participants constructed believability judgments for their weight loss methods/activities, in order to compare and contrast these with the concept of the proposed foods. The value of the exploratory mixed methods case approach, in which data was gathered in different ways as the thesis progressed, was evident. The findings from the quantitative and qualitative data were interpreted and integrated in a hermeneutic fashion to provide amalgamated findings and conclusions for the work.

1.9 Proposed Contributions

In one context, the research contributes to understanding of how believability judgements are made, and what may influence them. This facilitates initial conceptualisation of the construct for further development in concept research for functional foods. How the judgements might be linked to behavioural intentions has been noted, but not significantly examined to date. The research indirectly aims to add to the growing body of theory on consumer hope by illuminating the way in which hope may be implicated in believability judgements as a bias on cognitions about future outcomes. The research is one of the first to explore believability assessments using a constructivist approach which permits qualitative exploration of the personal justification and sense making processes which underpin such assessments. A further methodological contribution of the research is the utilisation of the Repertory Grid Technique (RGT) (Kelly, 1955) to assess personal constructs regarding believable weight management activities. Substantively, the research aims to contribute to the developing body
of literature which seeks to understand how consumers respond to health and wellness foods, specifically those with weight management benefits. The study has implications for future practitioners regarding the marketing, and personalisation of new functional food concepts, to assist acceptance and eventual adoption. Finally implications for policy makers are expected. An increased awareness of possible consumer biases will promote better decisions concerning health from a public policy standpoint.

1.10 Overview of the Thesis

Chapter One - Introduction
This chapter introduced the research thesis and its central phenomenon of interest, women’s believability judgements for the concept of weight management functional foods. It articulated the research problem concerning the need for further consumer centric exploration of believability as a construct of interest for functional food researchers. It then outlined the purpose and context for the research and established why it was important for the research to be conducted. The relevant theoretical concepts of interest, research questions, and research approach were overviewed as part of this initial groundwork, and the proposed contributions of the work were outlined.

Chapter Two - Research Background
The second chapter expands on the preliminary background to the research. It provides an overview of existing functional foods literature, and identifies the knowledge gap regarding consumer believability judgements. It then details the specific functional food positioning concept statement evaluated in the empirical research to address the knowledge gap. It justifies why women were chosen as the consumer group suited to this research, and why Australia and New Zealand are appropriate countries for the research.

Chapter Three – Literature Review
The literature review consists of three parts. Firstly, existing literature is overviewed for the research context of weight loss activities. It concerns literature for consumer weight loss activities that may influence the judgements. Secondly, the theoretical literature, which informed the consumer believability approach, is reviewed to highlight what is known and not known from a consumer research perspective. The chapter includes a critical review of literature on the believability construct itself and theoretical concepts relevant to the
overarching weight loss context. The chapter also introduces the theoretical framework of Appraisal Theory which informed aspects of the research. The knowledge gaps which gave rise to the research are articulated in the final part of the chapter.

*Chapter Four – Research Approach*

This chapter covers the research methodology and epistemological issues in detail and justifies the constructivist approach. Being a mixed methods methodological study which includes quantitative and qualitative research, it is important to state the researcher position and assumptions. The chapter justifies why a mixed methods approach was identified as appropriate for the research questions.

*Chapters Five, Six and Seven- The Empirical Studies*

These three chapters contain the full details of each of the studies. The aims, rationale, methods, findings, discussions and limitations are covered in detail for each study.

*Chapter Eight- Discussion of Findings*

In this chapter the key areas of findings from the empirical studies are integrated in six thematic sections. This is done in association with the current literature, showing similarities and contrasts with the existing body of theory.

*Chapter Nine- Conclusions*

The final chapter draws conclusions on the findings from the research in regard to the original research purpose. The theoretical, substantive and methodological contributions of the research are provided. Practical marketer implications, limitations and suggestions for future research to extend the study are also included, before a final conclusion is made.
Chapter Two: RESEARCH BACKGROUND

This chapter provides a background to the functional food context of the research. Firstly, current consumer research literature for functional foods is overviewed and major research gaps are identified. Next, the weight management foods concept employed in all three studies, is presented. The chapter concludes by justifying why women were selected for the research, and why Australia and New Zealand are appropriate countries for this study.

2.1 Functional Foods Overview

Functional foods are defined in this thesis as, foods and beverages fortified or enriched with health compounds to provide health and wellness benefits over and above the nutritional value of the food (Siro et al., 2008; Urala & Lahteenmäki, 2007). In contrast to dietary supplements which are additional to food intake, functional foods, such as orange juice fortified with calcium for bone health, offer health benefits from within the daily diet. First introduced in Japan in 1984 as a reaction to the country’s escalating health care costs, their development continues as a means to lift overall societal health and wellness, and add value to conventional foods (Bech-Larsen, & Scholderer, 2007; Grunert, 2013; Marinangeli, & Jones, 2013; Siro et al., 2008). Whilst estimates vary depending on definitions, the market value for foods making functional claims is substantial at over $US 40 billion per annum (Leatherhead Food Research, 2014), with functional ingredient sales growing substantially in the Asia-Pacific region (Marketsandmarkets.com, 2015).

However, growth rates in European markets have slowed since the early years of the millennium (Mellentin, 2014). This is due to industry factors such as stricter regulatory pressure for scientific substantiation of the health claims, and consumer attitudinal factors summarised below (Grunert, 2013; Leathwood, Richardson, Strater, Todd & van Trijp, 2007; Rogeaux, 2010). Fundamental paradoxes have been observed for consumers, where the possible advantages of enhanced health and wellness from food science and technology, are weighed against a reverence for what is natural, pure and nostalgic (Barsky, 1988; Biltekoff, 2010; Rozin, 1999).
2.2 Consumer Literature for Functional Foods

2.2.1 Overview of Consumer Attitudinal Research

Globally, consumer research for functional foods is substantial (for comprehensive reviews see, Pothoulaki & Chryssochoidis, 2009; Siro et al., 2008). The research effort has focussed on aspects of the overall attitudes to the foods, and the consumer understanding of specific health claims (Grunert, 2013; Krystallis, Maglarus & Mamalis, 2008; Nocella & Kennedy, 2012; Rogeaux, 2010; Urala & Lahteenmaki, 2007; Van Kleef, Van Trijp, Luning & Jongen, 2002; Verbeke, 2005). Overall, the research, typically undertaken using quantitative survey data, presents a mixed and contradictory picture of overall attitudes to functional foods. It points to extensive country variations, and specific differences based on particular foods and health claims. It also indicates productive avenues for further consumer-centric research.

Consumer interest is driven by the personal relevance of the health claim being made (Dean, Lampila, Shepherd, Arvola, Saba, & Vassallo, 2012), and the perceived benefits (Frewer, Scholderer & Lambert, 2003; Urala & Lahteenmaki, 2004). Older consumers and women are more likely to show interest due to growing health concerns and interest in health issues (Siro et al., 2008). Consumers do not necessarily regard functional foods as a natural grouping or a homogenous group of products (Siro et al., 2008; Urala & Lahteenmaki, 2007), and interest in one functional benefit does not necessarily lead to interest in other benefits (Peng, West & Wang 2006). Instead, attitudes are enhanced by the familiarity of the base food (e.g. yoghurt) which is influential in the positive perception of the healthiness of the claim (Annunziata & Vecchio, 2013; Krutulyte et al., 2011; Lahteenmaki, 2013). The taste (Verbeke, 2006), positive perceptions of the health benefit (Van Trijp & Van der Lans, 2007; Verbeke, 2006, Verbeke, 2005), and knowledge of the functional ingredients (Ares, Gimenez, & Gambaro, 2008; Luckow, & Delahunty, 2004; Verbeke, Scholderer & Lahteenmaki, 2009), have been shown to enhance positive attitudes. Reasons for less positive attitudes towards functional foods include preferences for more affordable foods, taste concerns, scepticism about the claims, the desire for naturally sourced health benefits, in addition to concerns over the perceived risks associated with food processing (Bower, Saadat, & Whitten, 2003; Childs, 1997; Grunert, 2013; Lahteenmaki, Lampila Grunert, Boztug, Ueland, Astrom & Martinsdottir, 2010; Mellentin, 2014; Siro et al., 2008). Unease about the perceived risks of using functional foods largely centres on, the perceived ‘unnaturalness’, degree of processing,
and suspicions of possible harmful effects to health such as allergic reactions (Annunziata & Vecchio, 2011; Bech-Larsen & Grunert, 2003; Frewer et al., 2003; Landstrom, Hursti, & Magnusson, 2009; Popa & Popa, 2012; Ronteltap, Van Trijp, Renes, & Frewer, 2007). Food has always included issues of risk, however, this has become more salient for consumers in modern society. A preference for naturally occurring nutrients over fortification has been demonstrated (Devcich, Pedersen & Petrie, 2007), reflecting the emergence of consumers who demand quality and authenticity in food sourcing, processing, and distribution (McEachern, Carrigan & Szmigin, 2010). This is further indicated by the elevation of organically grown produce to a significant mainstream and marketed commodity (Grunert, 2013; Lahteenmaki et al., 2010; Marinangeli, & Jones, 2013).

Acceptance of new food technologies has been suggested as an important determinant of the consumer response to functional foods with added health claims which embody science innovations (Popa & Popa, 2012; Ronteltap et al., 2007). Extant literature in the consumer behaviour domain provides considerable insight into the role of technology as a positive enabler in consumers’ lives, and in doing so underlines overarching tensions and paradoxes as they interact with it. Technology, as a general concept, is perceived as offering feelings of greater freedom, competence and control yet, it can also be identified as an intrusion, leading to feelings of enslavement, incompetence and chaos (Mick & Fournier, 1998). In the present context, whilst there is the promise of enhanced health and wellness from a bio-technological solution, this could seem to contradict central beliefs about what it means to be healthy, considering that food for many consumers represents values of naturalness, purity, nostalgia, and simplicity (Biltekoff, 2010). Whether consumers find the innovation behind the health claims able to contribute to their desired outcomes, is an important aspect of the functional food response which has not received widespread attention.

2.2.2 Marketplace Scepticism

An erosion of trust is apparent for added health claims on food, with scepticism and consumer confusion prevalent across global regions (Fenko, Kersten & Bialkova, 2016; Hasler, 2008; Petrovici, Fearne, Nayga, & Drolias, 2012; Szakaly, Szente, Polereczki & Szigeti, 2011; Tan & Tan, 2007). ‘Healthiness’ and ‘naturalness’ have status in the marketing of foods (Rozin, 2005; Rozin, Fischler, & Shields-Argelès, 2012; Rozin Spranca, Krieger, Neuhaus, Surillo, Swerdlin, & Wood, 2004). However, the prolific use of exaggerated and misleading health claims on food packaging has contributed to consumer scepticism (Hasler,
2008). The complexity and asymmetrical nature of health claim information, where manufacturers are perceived to hold greater knowledge, can lead to perceptions of stakeholder bias. These negatively impact attitudes and contribute to a lack of confidence held by consumers (Eden, Bear & Walker, 2008; O’Key et al., 2010; Tan & Tan, 2007). Although the regulatory environment for different types of health claims requires different levels of substantiation, consumers are not generally aware of these intricacies, and claims can be viewed as mere advertising tools or ‘marketing gimmicks’ with little scientific support by some sceptical consumers (Lalor, Madden, McKenzie & Wall, 2011; Verbeke et al., 2009).

2.2.3 Biases in Claim Evaluations

In contrast to the above, research also indicates the existence of underlying consumer biases suggesting some consumers are motivated to interpret health claims in ways that confirm and reinforce their pre-existing beliefs about them (Mason & Scammon, 2011; Rogeaux, 2010). For example, consumers with higher health consciousness, defined as the degree to which a person plays an active role in maintaining his or her health, use confirmatory biases and are more likely to believe functional food messages with conflicting claims than consumers with lower health consciousness (Naylor, et al., 2009). Grunert et al., (2011) found those with more positive attitudes to functional foods declared they had a higher understanding that yoghurt enhanced the body’s natural defences, and were more at risk of overestimating the claims. This suggests the presence of a ‘functional food halo’ effect, where functional products in a category (such as yoghurt) are seen as healthier alternatives than their regular counterparts. Simplification by the use of heuristic cues is also evident where, for example, Wansink (2003) found the believability of health claims on food packages was increased by their placement on the front of the pack. Consumers, more generally, are thought to cope with their uncertainty regarding health claims with the use of heuristics such as the ‘health halo’ (Chandon & Wansink 2007; Kozup, Creyer & Burton, 2003), and can overgeneralise and mis-interpret nutrient claims (Andrews, Burton, & Netemeyer, 2000; Andrews, Netemeyer, & Burton, 1998).
2.3 Research Gap for Functional Foods

Overall, the literature indicates the enormous diversity in the consumer response to functional foods, spanning positive attitudes, ambivalence, and outright rejection. Within the extensive empirical research undertaken for the foods, knowledge gaps remain in understanding deep-seated influences which may govern consumer perceptions of the enhancement claims. Given that added health and wellness benefits are credence characteristics that are not directly observable or verifiable after their immediate usage, consumers are thought to require some degree of initial ‘belief’ in the claims (Grunert, 2002). However, existing research focuses on consumer’s level of understanding and knowledge of the claims, due to regulatory requirements and the assumption that clinical evidence will renew consumer trust and acceptance (Anunziata & Vecchio, 2011; Grunert, 2013; Rogeaux, 2010).

It was therefore seen as important to give insight into such judgements from a consumer centric perspective. Motivational biases appear to operate for some consumers as they consider the claims of functional foods. Whilst these have been identified in the literature, the reasons for these biases needs to be further explored. In several studies quantitative linkages have been made between believability and outcome variables such as intention to try or buy. Childs (1997) noted a relatively low correlation \((r = 0.38)\) between intention and believability for health claims. Williams, Ridges, Batterham, Ripper & Hung (2008) found the intention to try health products was driven independently by attractiveness, uniqueness and believability, with attractiveness ahead of believability. Interestingly, in comparison, credibility studies show stronger links to intentions. For example, Van Kleef, van Trijp & Luning (2005a) found the perception of the credibility of a functional food significantly enhanced the intention to purchase \((r = 0.52)\), and Kemp & Bui (2011) found brand credibility a major predictor of the commitment to buy a heathy brand. However, in general, research remains relatively scarce into the way in which believability may be implicated and linked to future intentions for purchase actions for functional foods.

2.4 The Concept of Satiety Enhancing Functional Foods

The proposed functional food concept for the research enquiry is currently under development for possible commercial production. Foods with added hunger control benefits
are viewed as promising innovations to assist consumers to control food overconsumption (Griffioen-Roose, Wanders & Banati, 2013; Halford & Harrold, 2012; Hetherington et al., 2013; Van Kleef et al., 2012). The inability to control hunger and the subsequent overconsumption of foods is thought to be counterproductive to weight loss activities and has been identified as a major reason for failed weight loss attempts (Baumeister & Tierney, 2011; Hetherington et al., 2013; Stroebe, Mensink, Aarts, Schut & Kruglanski, 2008). Consumers who have better self-regulation and control have been identified as more likely to achieve success (Redden & Haws, 2014). The proposed functional food is to be fortified with plant phytochemical compounds which potentially control hunger for longer periods by providing a greater sense of fullness, or satiety. Satiety is defined as the feeling of fullness that persists after eating food (Benelam, 2009). It is a continuation of ‘not feeling hungry’, where the body is not receiving physical signals motivating it to commence eating again. In this way satiety is a ‘between meals’ effect (Van Kleef et al., 2012). In contrast, satiation refers to the signal to stop eating within a particular eating occasion because of the immediate sensation of a full stomach. By enhancing the satiety of foods, and extending the length of time until an individual gets hungry again, better self-control over eating is proposed, which will potentially assist consumers in their efforts to lose weight. In this way, the foods serve as a consumer ‘tool’ to provide a sense of personal control.

2.4.1 The Product Concept Description

The product concept description, which was presented to research participants in all three empirical studies, described a proposed food range fortified to provide a greater sense of fullness from smaller portions (see Figure 2). The description, typical of those used in early new concept research (Moskowitz et al., 2008), was developed by the researcher as a positioning concept. Concepts developed for new product consumer research range on a continuum from mere concept sentences, to positioning concepts, to complete prototypes (Lord, 2007; Moskowitz et al., 2008). Whilst the degree of detail depends on the research purpose, Lees and Wright (2004) have shown that consumer responses to concept statements are not necessarily affected by the degree of embellishment. The positioning statement was tested and refined in pilot testing, prior to the commencement of the research fieldwork (details of the pilot testing follow in Chapter 5, Study 1). The statement wording was also verified by an independent business health expert and a registered nutritionist.
Chapter Two

RESEARCH BACKGROUND

Figure 2: Product Concept Description Presented to Research Participants

**LOOKING FOR AN EASIER WAY TO CONTROL YOUR EATING?**

In today's world, where food and drink comes fast and easy, it’s understandable that weight control has become a challenge for many people. To control your weight you usually have to adjust the balance between the amount of energy you consume and the amount you use physically. This may involve watching the types of foods and beverages you consume as well as the amount. Often, however, you are left feeling hungry and unsatisfied. Even with your best efforts, you end up snacking on the wrong types of food, and/or over-eating.

But, managing your hunger and losing weight doesn’t need to be impossible. A new range of everyday foods and drinks will soon be available to help make it easier for you to keep hunger at bay and to control your weight.

The range will include breads, cereals, margarine, yoghurts, cheeses, milk and other drinks. These products will help you to consume less through the day because they are designed to satisfy your appetite more quickly and to keep your hunger at bay for longer. Less hunger and a greater sense of fullness from a smaller portion, puts you in charge of when and how much you want to eat.

The benefit for you is convenient, longer lasting control over your hunger, so you can stay on track and achieve your weight-control goals.

The decision was made to convey the idea of a new range of foods to communicate a sense of the transferability of the benefit across different food carriers. Previous functional food research has shown that consumers focus upon the carrier food, and therefore it is important that the food itself is liked and congruent with the health benefit (Van Kleef et al., 2005a). Therefore, rather than selecting one particular food type, for example bread, the concept conveyed a range of foods so as to not exclude consumers who do not usually include bread in their regular diet. This also allowed the researcher, in the qualitative studies, to probe into consumer perceptions of appropriate foods.

2.4.2 The Consumer Response to Satiety Enhancement

Whilst the term ‘satiety’ itself is not widely apparent in the consumer marketplace, the wider literature shows consumers have awareness of the satiety properties of some foods such as protein and fibre, and understand the benefit of delaying hunger (Bilman, van Trijp, & Renes, 2010). Currently, commercial products are available with functional claims of prolonging fullness (e.g., Kraft slow release biscuits, and meal replacement bars), and other indirect competitors such as weight loss supplements (e.g., Garcinia Cambogia), protein powder...
supplements, and naturally sourced items such as chia seeds, have become available in this market space (Mellentin, 2012).

However, empirical research also shows consumers may be potentially confused about the meaning and effects of satiety as a benefit. In a study of meal replacement bars, consumers appeared unsure about the meaning of satiety (Miraballes, Fiszman, Gambaro & Varela, 2014). Brunstrom, Shakeshaft, & Scott-Samuel (2008) found a mismatch in consumer expectations of satiety and the calorie content of foods. Additionally, Bilman et al. (2010), showed consumers did not vary in their snacking choices across different situations to obtain greater satiety. Nonetheless, they did link product features (high fat, protein and sugar) with their likely effect on satiety levels. Consumer attitudinal research on foods with satiety enhancement is emerging, amidst debate in the literature about the potential over-interpretation by consumers of satiety-related claims (Bellisle & Tremblay, 2011; Booth & Nouwen, 2010; de Graaf 2011; Mela, 2011; Smeets & van der Laan, 2011). At question is whether a satiety benefit will be regarded by consumers as a ‘magic bullet’, in which case they may undertake less personal responsibility in their weight loss attempts (Booth & Nouwen, 2010). A satiety claim of enhanced fullness is seen to underplay the complexity of other factors involved in weight loss and be counterproductive to the obesity/overweightness effort (Booth & Nouwen, 2010). In contrast, the consumer benefit is alleged to be an important one which will serve as a useful means of assisting with hunger control (de Graaf, 2011; Mela, 2011). To support this argument, Bilman et al., (2012), in an online study of over 1500 European participants, concluded that consumers were able to correctly interpret and understand that a satiety claim related to hunger management. Overall consumers did not expect a ‘magic bullet’ effect, and generally understood that personal efforts would be needed to convert the product attribute of fullness into a weight control benefit. However, it is noteworthy that the authors found that restrained eaters (also known as chronic dieters who have persistent issues in achieving weight loss) were more likely to over-interpret the claims, and the possible vulnerability of this group was recorded, although not highlighted.

As discussed in the next chapter, biased and over optimistic consumer expectations of weight loss products have been found in several reviews. These also coincide with observations that weight loss advertising is perceived as deceptive. Research is lacking regarding the way in which consumers may balance these conflicts between anticipation and possible disappointment. There are several possible levels of interpretation that consumers may
consider (Bilman et al., 2012). On one hand, there are the functional features of stomach fullness brought about by the ingredient(s), and the personal and emotional benefits of feeling fuller. But importantly for consumers, there is the potential outcome of achieving weight loss, which serves as a central goal related motivation for trying such foods. The proposed foods concept, therefore, with its promise of enhanced satiety and management of hunger from a technological innovation, proposes control over a powerful human drive. Just how consumers go about deciding if this is a believable option is fully explored by this research.

2.5 The Research Target: Women Seeking Weight Loss

The weight loss activities of women seeking weight loss were seen as a suitable setting for exploring consumer meaning making for the proposed food product concept. The women who participated were either, attempting to lose weight (Studies 1 & 2), or interested in and/or attempting weight (Study 3). Predominantly they were seeking to lose between 2 and 30kgs and were representative of women who express a desire to lose weight, and experience the weight loss process using their own resources, rather than being medically assisted. They were, thus, seen as indicative of women who would form the target audience for such foods.

There were several reasons for the sole focus on women participants. According to Schroeder (2003), gender is a central organising feature of our identity, which intersects with the entire realm of consumer behaviour. In much of the historical weight loss literature from a consumer psychology perspective, many important gender differences have remained unexplored (Bublitz, Peracchio & Block, 2010). Although interest in body image is increasingly exhibited by men (Dakanalis, & Riva, 2013), women continue to be more likely to use weight loss products, and engage in chronic calorie reduction, crash dieting, and rigid exercise habits (Alexander & Tepper, 1995; Business Insights, 2011; St James et al., 2011). They may also be more likely to gain weight than men (Aljadani, Patterson, Sibbritt & Collins, 2013). In addition women’s thoughts, feelings, attitudes and behaviours regarding food vary from those of men (Beardsworth, Bryman, Keil, Goode, Haslam & Lancashire, 2002). For example, women have been found to be significantly more likely to feel guilt and regret over food and eating (Bennett, Greene, & Schwartz-Barcott, 2013; Murray & Vickers, 2009). In an Australian survey, the relationships between health and weight loss concepts were far more complex for women than men (Wang, Worsely & Hunter, 2012). In sum,
women have a different form of involvement in their weight loss. Further to this, their acknowledged ability to talk about personal subjects more expressively in interviews than men was instrumental in the selection of women as the appropriate gender for the study (Burns, Williams & Maxham, 2000).

2.6 The Australian and New Zealand National Context

The research participants resided in the four main urban centres of Australia, and the urban suburbs of Auckland, New Zealand. Recent statistics point to these countries having a high incidence of obesity and overweightness, with both countries in the top brackets of affected countries. Two thirds of adults are currently recorded as overweight in these countries by the World Obesity Federation (2015). The urban centres in both nations are ethnically diverse with cultural landscapes reflecting a history of British colonization, and more recent immigration from a diverse range of cultures and ethnicities (King, 2003; Morris, 2005). Food availability and choice is considered to be eclectic and consistent with other contemporary western societies, where substantial individual variations occur within cultural, social and environmental boundaries (Sobal, Bisogni, Devine & Jastram, 2009). The grocery industry remains the dominant supply channel, global fast-food outlets are prevalent and the eating away from home culture is experiencing growth. This also coincides with the growth of farmers markets and a preference for local food (Lawson, Guthrie, Cameron & Fischer, 2008). As with other nations, lower socio-economic status has an increasingly detrimental influence on food choice and healthiness (Wilson, Gearry, Grant, Pearson, & Skidmore, 2014). Whilst functional food consumer acceptance in these specific countries is difficult to ascertain, one comparison shows the acceptance criteria for functional food in Australia is equivalent in many ways to that of European consumers (Williams et al., 2008).

2.7 Chapter Summary

The concept of functional foods with added health benefits has relevance and appeal to many consumers. Whilst the literature indicates the appeal of the foods is specific to the influences of geographical market and the particular health claims, there are also indications of substantial variance in attitudes. Much has been learnt about consumer concerns regarding the perceived risks and perceived unnaturalness of the category, and the pre-existing
scepticism for the concept is indicated. The way the foods, which can embody science and technology, are perceived to realise goals and enable positive changes, remain areas of significant consumer research interest. However, a gap has been identified in understanding the personal believability of the concept, and why responses may differ for consumers.

The concept of satiety enhanced foods with weight management benefits was introduced and provides the functional food exemplar for the present thesis. Unanswered questions remain about the consumer response to the proposed foods. As the existing literature has identified, whilst there is a growing consumer interest in the benefits of satiety from foods across consumer segments, the idea of foods with enhanced satiety for weight loss is not straightforward and consumer research is called for concerning how best to position them, and convey their benefits (Van Kleef et al., 2013). Understanding why some women might view them as believable, whereas others do not, will make a substantive contribution to the multidisciplinary efforts to bring them to market. The chapter concluded by addressing why the study was conducted in the present context, and took place within Australia and New Zealand. The next chapter reviews literature relating to the weight loss activities context and key theoretical constructs of interest for the exploration.
Chapter Three: LITERATURE REVIEW

This chapter aims to synthesise areas of the literature relevant to the research problem and to identify further knowledge gaps arising from the specific context. The chapter has three parts as follows:

1. **Women’s Weight Loss Activities** - Firstly, literature is overviewed on women’s weight loss activities and the consumption marketplace in which they take place. This includes a review of literature concerning the various motivations, identity issues, and consumer challenges with the process. Literature which considers perceptions of self-control is also reviewed. Although considerable multi-disciplinary research has been undertaken to understand, and ultimately improve weight loss behaviours, important gaps in the literature remain regarding consumer attitudes to weight loss products and activities.

2. **Believability Judgements** - In the absence of research on consumer believability, this chapter reviews historical approaches to believability and the closely related construct of credibility. It then outlines the believability approach for the research, which augments traditional ways of assessing believability/credibility. The appraisal theory framework which underpins the believability judgement process is introduced. Literature is also reviewed on hope and scepticism which are relatively undeveloped concepts within consumer behaviour, and which are argued to be closely interwoven with believability judgments in the present weight loss context.

3. **Theoretical Research Gaps** - The chapter concludes by summarising theoretical knowledge gaps identified across the literature review.

### 3.1 Part 1: Women's Weight Loss Activities

The socio-cultural practices used to control body weight represent a rich and relevant context in which to explore judgements for the proposed product concept. Weight loss activities represent a significant consumption event in the lives of many women, but take place in a complex and conflicting environment. On one hand, socio-cultural body image expectations are thought to powerfully motivate weight loss activities, but on the other, these activities are
undertaken in a food rich consumption environment directly at odds with personal weight loss endeavours (St James et al., 2011). However, as will be shown, and somewhat surprisingly, the way in which consumers approach, and make sense of their weight loss activities, has only recently received attention in the academic consumer behaviour literature.

3.1.1 Weight Loss Approaches

Weight loss activities represent a dynamic, individualised and complex mix of approaches, typically aimed towards personally desirable outcomes. They can be aimed at a specific weight loss outcome, or exist as part of a lifestyle regime, where the aim is weight management as a by-product of an overall health orientation (Haynos, Field, Wilfley & Tanofsky-Kraff, 2014). Activities may involve restrained caloric intake, periodic fasting, control over food portions and food groups (Putterman & Linden, 2004). Alternatively there may be a single dietary change, such as using artificial sweeteners, or adjusting one’s exercise behaviour (Malinauskas, Raedeke, Aeby, Smith, & Dallas, 2006). In the personal undertaking of weight loss activity, target goals are sometimes pre-specified, but the undertaking can also be manifested as an interest, or a vague desire to lose weight. For some the approach is nonchalant, whilst for others there is chronic dieting to lose weight, where periodic dieting is considered normal behaviour (Andreyeva, Long, Henderson & Grode, 2010; Putterman & Linden, 2004). A line of progression in the types of activities was revealed in a study of Australian dieters, where many ‘fad diets’ were attempted unsuccessfully, before advancement to commercial weight loss programs (Thomas, Hyde, Karunaratne, Kausman, & Komesaroff, 2008). As will be discussed, the activities involve considerable challenge for some consumers, and more often than not, involve the need for self-control and willpower. Please note, appropriate terminology for describing weight control, weight management, weight loss, and dieting behaviours has been the subject of some debate in the literature. As suggested by Granberg (2011), it is advisable, wherever possible, to use terminology derived from research participants in interviews, and this has been attempted in the chapters which follow.

3.1.2 The Dieting Marketplace

The diet and weight loss industry represents an area of consumption significance, estimated by worldometers.com (2016) to be valued at over $US60 billion, and growing. It consists of a multiplicity of products and services including dieting foods (with implied weight loss claims), programs, supplements, de-toxes, books, apps, and on-line resources (for a review,
These include global, commercial brands such as Weight Watchers and Jenny Craig. Weight Watchers offers organised surveillance for the self-management of food intake using a personalised daily total of ‘points’, and receive a positive consumer response due to its supportive role on spiritual, social, and therapeutic levels (Ballentine and Stephenson, 2011; Moisio & Beruchashvili, 2010; Thomas et al., 2008). In contrast, Jenny Craig, which works on the principle of complete control over daily calorie intake from the provision of prepared meals, requires reliance on participant’s self-discipline to stay within narrow boundaries. The latter has been revealed to be an unrealistic and solitary experience for Australian weight loss attempters (Thomas et al., 2008). The above commercial programs now compete against free alternatives offered online, including smart phone apps, weight loss forums, and messaging via social networking sites, such as Instagram, Facebook, Twitter, Snapchat, Pinterest, as well as internet success story blogs, and reality television. Research to date shows social media weight loss support to be something of a double-edged sword, being beneficial as a source of personal support, but also encompassing negative social comparisons (Moorhead, Hazlett, Harrison, Carroll, Irwin, & Hoving, 2013; Thomas et al., 2008). Overall the diet industry is thought to intensify the conflict for women, with optimistic messages of ‘fast and easy weight loss’ offered for a practice which normally involves restraint and deprivation (Katz, 2005; St James et al., 2011). Anecdotally, as reported by Nutraceuticals (2012), there is confusion for consumers due to the lack of practical and generalizable solutions, and competing claims from the media, public policy statements, medical professionals, and marketers. Figure 3 shows an illustration of the persuasive approach of the diet industry, available from a website search for “fast weight loss”.

*Figure 3: Example of a Weight Loss Advertisement*
However, as noted, the existing consumer behaviour literature is sparse with regards to consumer responses to weight loss activities, despite studies indicating the potentially motivated nature of behaviour towards weight loss products/services. Many consumers are thought to be willing to believe weight-loss advertising claims that do not stand up to scientific scrutiny, even when they contradict the social messages communicated by health-focused policymakers (Pirsch et al., 2013). Pillitteri, Shiffman, Rohay, Harkins, Burton, & Wadden (2008) found that dietary weight loss supplement usage is common for those trying to lose weight due to their strong claims of effectiveness, but concluded there are gross consumer misconceptions about the safety, efficacy, and regulation of such supplements. Chang & Chiou (2014) found that, taking weight-loss supplements gives the impression that one can be liberated from the need for dietary control, and induces a false sense of progress in actual weight control, leading to less than optimal diet regulation. Additionally, Andronicou, Hackett, Richards & Kriska (2009), in a study of ‘Over the Counter’ (OTC) weight loss products, found users thought them unsafe, but still used them to try to achieve rapid weight loss. They were given credibility from being sold in pharmacies.

Moreover, the weight loss regulatory literature indicates that the dieting industry has contributed to exaggerated weight loss claims promising rapid weight loss beyond realistic expectations. Regulators, such as the Federal Trade Commission, (2014), have found repeated evidence of consumer deception, and advertising has been shown to involve the use of visceral or instinctive cues, which raise purchase intention even amongst sceptical consumers (Amos & Grau, 2011). Advertising for weight loss products is observed to be the least believable in relation to 40 other product categories, falling behind advertising for hair regrowth solutions (Prendergast Liu & Poon, 2009). However, the continued growth of the weight loss industry implies that consumers continue to desire assistance in their endeavours, despite an apparent underlying lack of trust in the industry. Combined, the above literature indicates the huge complexity in understanding how women may go about judging the concept in the present context.

3.1.3 Motivations for Weight Loss

Given the acknowledgement of motivational aspects of consumer behaviour (Ratneshwar, Mick, & Huffman, 2003), the underlying motives for engaging in weight loss activities were of interest to the current research as a potential influence on the believability responses for the proposed foods. The current literature focusses on several fundamental drivers for
attempting weight loss. Many individuals consider health and the minimisation of health risks as their most legitimate overall reason for weight loss (Bublitz et al., 2010; Kwan, 2009; Puttermann & Linden, 2004). Social and psychological ends are also central to the need to undertake activities, such as establishing long term romantic relationships (Thomas et al., 2008). Weight loss activities may also be undertaken directly for appearance-related motivations (Granberg, 2006; Whale et al., 2014). For some individuals weight loss is overtly and totally appearance driven, even when weight is at healthy levels (Prendergast et al., 2009).

The way in which women are encouraged to conform to the demands of an ideal appearance, and higher-order cultural ideals of feminine beauty, has been well documented (Anschutz, Engels, Becker, & van Strien, 2008; Bordo, 2003; Hafner, & Trampe, 2009; Hesse-Biber 2007; Kwan, 2009; Orbach, 2006; Thompson & Hirschmann, 1995; Whale et al., 2014). For example, smaller clothing size labels evoke more positive self-related mental imagery, and have been shown to be related to appearance self-esteem (Aydinoglu & Krishna 2012). Interestingly, aesthetic appearance ideals provide a motivation for consumers even when the same consumers simultaneously voice criticism over the body-obsessed culture of Western society (Kwan, 2009), and in Asian cultures such as Korea. It appears that, being thin is seen to equate to being healthy, and therefore appearance motivations can be justified to oneself as part of an overall desire to appear healthier (Kwan, 2009). Differences in how individuals may go about the process of weight loss can be influenced by their motivations. The more that dieting was motivated by appearance issues, or body dissatisfaction, the more participants reported using unhealthy dieting strategies, and experienced lapses in restraint (Puttermann & Linden, 2004). Other findings suggest that women aged 60-69 years also face complex motivations regarding weight loss, evident in the dual existence of contentment with their weight, yet with an underlying desire for physical change (Liechty, 2012).

For those who perceive themselves to be overweight, there is also added stigmatisation which serves as a motivation for beginning weight loss activities. The Western cultural discourse around ‘thin, fit and healthy’ individuals is associated with positive self-concept and feelings of moral superiority, whereas ‘fat, unfit and unhealthy’ labels are associated with laziness, and immorality (Cronin, McCarthy, Brennan, & McCarthy, 2014; Rail & Lafrance, 2009; Thompson & Hirschman 1995). The visibility of size and the belief that weight should be controlled create powerful and pervasive biases directed against overweight people (Puhl &
Brownell, 2006), and some are vulnerable to this stereotyping, labelling and discrimination (Granberg, 2011). This stigma can also contribute to a cycle that then leads to increased eating (Tomiyama, 2014), and exercise avoidance (Vartanian & Novak, 2011). In summary, the literature shows the motivations behind women’s decision to lose weight are highly personal and perhaps even unconscious to them. They exist as a mix of complex factors including discrepancies between one’s existing self-image, and desired self-image, personal self-esteem and self-confidence, and hence are likely to be important influences in the responses to a product based solution.

3.1.4 Identity and Weight Loss

Various conceptualisations of the self and identity have received considerable attention for their relationship with consumption behaviour (Belk, 1988; Reed et al., 2012; Schroeder, 2003; Sirgy, 1982). The importance of accounting for identity-based consumption in food research has also been stressed as an important influence in food choice (e.g., Bisogni, Connors, Devine, & Sobal, 2002; Bisogni, Jastran, Seligson, & Thompson, 2012; O’Key & Hugh-Jones, 2010). The concept of identity describes an overall perception that one holds of oneself. It is multifaceted and dynamic, and serves as a fundamental and powerful influence on how individuals, think, feel, and behave in social situations (Markus & Wurf, 1987; Stryker & Burke, 2000). Identity encompasses concepts of both a personal identity, which is specific to the individual, and a social identity, which relates to the characteristics of the groups they see themselves belonging to (Reed et al., 2012; Tajfel & Turner, 1979). A social identity is based on an awareness that one belongs and is associated in some way with others, and is manifested in organised membership or a group of like-minded friends and family, or a wider ethnic group. Social identity theory (SIT) was developed to explain why people form social identities and favour the groups to which they feel they belong to (in groups), and contrast these against the ones with which they perceive they don’t belong (out-groups) (Tajfel & Turner, 1979).

It was therefore important to understand how identity constructions might be implicated in believability judgements. The process of forming a personal identity is thought to involve comparisons between one’s actual self and other possible desired selves, or undesirable selves (Markus & Nurius, 1986), and making comparisons with current self-image, is seen as a fundamental motivation of consumption behaviour, hence its pertinence to body weight activities. As discussed above, considerable stigmas have been observed regarding weight
and body image, which are thought to be powerful motivators of behaviour. The concept of a weight-centred identity has been isolated as a central criterion of self-identity, where perceptions of being ‘big’ and ‘fat’ are aligned with ‘unattractiveness’ (Epiphaniou & Ogden, 2010). These are viewed as powerful motivations behind the desire for changing one’s weight. Related to this is the concept of an identity transformation, or desire for destigmatisation (Granberg, 2011). The liberation from being overweight, and the re-invention of oneself after weight loss which alleviates one from the need to be weight focussed, have been demonstrated (Epiphaniou & Ogden, 2010). However, complex issues of one’s identity may also need resolution. For example, women must deal with conflict between their ‘mothering’ identity and the self-orientation and moderation required for weight control (Cronin et al., 2014; Fikkan & Rothblum, 2012; Orbach, 2006; Warin, Turner, Moore & Davie, 2008). Given that consumer identity projects are typically considered to be goal driven (Mick & Buhl, 1992), the influence of identity construction on the response to a proposed weight loss product is likely to be profound, and arise from idiosyncratic perspectives. However, to date understanding the influence of personal and social identities within functional food contexts remains limited and there is a requirement for further qualitative understanding regarding how this may influence believability judgements.

3.1.5 The Challenges of Weight Loss Activities

Many consumers find it difficult to make and maintain the necessary dietary and physical adjustments which involve self–denial and reliance on an individual’s own effort and significant personal self-control (Putterman & Linden, 2004). For example, although more than half of Americans are on a diet, little long term success in weight reduction is reported (International Food Information Council (IFIC), 2012). Nearly two thirds of dieters who do lose weight regain it after about two years (Elfhag & Rossner, 2005; Kruger, Galuska, Serdula, & Jones, 2004; Mann, Tomiyama, Westling, Lew, Samuels, & Chatman, 2007). Adhering to a particular diet is achievable for a short time period, but discontinuation is common when participants are provided with the option to do so (Dansinger, Gleeson, Griffith, Selker & Schaefer, 2005). Further to this, the surrounding norms of the wider food environment, the prevalence of overweightness, and friends and family directly at odds with weight loss endeavours who may often undermine weight loss activities, pose further problems for women in particular (Whale, et al., 2014).
There is considerable evidence of biased inferences made about weight loss strategies. For example, Bates, Burton, Huggins & Howlett (2011) showed consumers underestimate calories in foods especially those with higher levels of calories. Dieters, in particular, are influenced by heuristic food-related cues in their evaluations of food healthiness (Irmak, Vallen & Robinson, 2011). The tendency for the role of increased physical exercise to lead to an overcompensation by increased food consumption, has been demonstrated and can even lead to weight gain (Campbell & Warren, 2015; Chandon & Wansink, 2012). Chernev (2011) identified a misperception which he termed the ‘dieter’s paradox’, where dieters (individuals most concerned with watching their weight) erroneously believed that eating healthy food in addition to unhealthy food can decrease a meal’s calorie count. In a USA health industry study, 76% of consumers revealed that they do not know how to eat to lose weight, and only 20% followed any sort of structured plan. Furthermore, 32% admitted to loving eating and not wanting to give it up, and, over 15% admitted to being disgusted with themselves about their eating (Nutraceuticals World, 2012).

3.1.6 Perceptions of Control-a) Self Control
Gaining mastery, self-control and self-regulation, are potent influences on behaviour, and a fundamental feature throughout the consumer weight loss literature. It is of relevance to the current research, which involves the judgment of an external source of control, in a personal area where control may be perceived to be reduced or lacking. Psychologists give emphasis to the conflicting self-control dilemma between the short term desire to eat palatable, tasty food (seen as a hedonic goal) and the longer term weight loss goal (Stroebe et al., 2008; Stroebe, van Koningsbruggen, Pories & Aarts, 2013). It appears that some individuals are more sensitive to affective influences and prone to have stronger behavioural impulses (Bagozzi & Moore, 2011; Bryant, Yarnold, & Grimm, 1996; Larsen, van Strien, Eisinger, Herman & Engels, 2007; Mela 2006). The literature also shows consumers make distinctions between physical and mental hunger (Murray & Vickers, 2009). The term ‘emotional eating’ was coined to indicate a pattern of overeating particularly in response to negative emotions such as sadness, anxiety and irritation (Canetti et al., 2002; Van Strien, Frijters, Bergers & Defares, 2005). Cravings for certain foods, and the impulsive, immediate hedonic gratification from food, have also been identified as interwoven aspects of the desire to overeat (Moore & Konrath, 2015), with many consumers shown to eat to feel better for their own emotional well-being (Baumeister, 2002).
Self-control provides an individual with the ability to override undesired behaviours and impulses (Mischel, 2011, 1974). The setting of goals, monitoring and regulation of behaviour have all been intensively researched within psychology. The focus of the literature is on micro processes associated with self-control and self-regulation, typically using experimental designs, and often undertaken amongst student samples. It is commonly understood that weight loss requires a certain degree of self-control, and self-regulation is an important personal ability enabling an individual to change from current eating patterns, amidst existing consumption norms and habits (Stroebe et al., 2008). For example, when faced with a desirable chocolate cake, some consumers give in to the temptation, whereas others seem to be able to say “no” and exercise a degree of willpower. To break these routinized and automatic eating routines, often arising from stimuli in the environment, constant monitoring is required, which is known to be demanding (Baumeister, Muraven, & Tice, 2000). The process of achieving self-control is often viewed as a battle between willpower and desire, and considerable research has looked at ways by which consumers can increase their will power, or at least not deplete it (e.g., Redden & Haws, 2013).

As part of understanding why some individuals seem to have superior self-control, it seems that the capacity for self-regulation is likely to be a factor strongly associated with successful weight loss behaviour (Baumeister 2002; Baumeister, et al., 2000; Redden & Haws, 2013). However, it appears that self-control may be an inherent stable individual trait which enables some individuals to be able to more effectively counteract desire (Redden & Haws, 2013). Effective self-regulation seems to require a consideration of longer term implications and improved attention to the goal by being able to transcend the immediate situation (Baumeister & Heatherton, 1996). A person’s self-regulation appears to be a limited, but renewable device, with failure more likely under stressful circumstances or fatigue. It is theorised that if one keeps in mind the desired goal, attractive temptations which challenge self-regulation will be easier to resist (Kruglanski, Shah, Fishbach, Friedman, Chun, & Sleeth-Keppler, 2002). A seminal addition to psychological theory was made by Bandura (1977), with the development of the concept of self-efficacy. This concerns the way in which people’s behaviour is influenced by their perception of their capability to perform a task within a specific domain. Self-efficacy has been shown to be a predictor of successful weight loss behaviours (e.g, Armitage & Conner, 2001; Conner & Norman, 1994; Schifter & Ajzen, 1985; Teixeira, Going, Sardinha & Lohman, 2005), and more recently quantitative scale development has been specified (Bandura, 2006).
3.1.7 Perceptions of Control- b) Consumer Agency

Agency, a foundational philosophical and sociological concept, is encompassed in many literatures, and denotes the capacity of an autonomous agent to act and make independent choices (Borgerson, 2005; Emirbayer & Mische, 1998). Within consumer research, agency is typically narrowed to the sub-component of consumer agency, referring to the ability of a person to act regarding their consumption, and has been identified as a useful construct which illuminates consumer/ market interactions (Belk, 1991). Psychologists have identified several constructs which attempt to explain how people obtain mastery over themselves. The locus of control (LOC) refers to the degree to which individuals see themselves as being able to influence events in their lives (Rotter, 1966). Some individuals, (with high internal LOC), believe they are able to influence their lives using planning and self-determination. In contrast, others (with high external LOC), see their lives as being influenced more by external influences such as powerful others, and even chance and fate. LOC is widely used in health psychology where a variant specific to health (HLC) has been developed to measure one’s perceived control over their health (Wallston, Wallston & DeVellis 1978). Feeling in control of one’s health, leads to more adaptive and preventive health behaviours, such as the performance of exercise and dieting behaviours (Norman, Bennett, Smith & Murphy, 1998). More specifically, the weight locus of control (WLOC) (Saltzer, 1982), has been developed for specific weight loss applications. Similar distinctions can be found between people with internal and external WLOCs. Across several different studies, this orientation has been shown to influence completion of a weight loss program (Saltzer, 1982), predict weight-related attitudes and behaviours (Holt, Clark & Kreuter, 2001), and affect perceptions of small and large models in advertising (Martin, Veer & Pervan, 2007). Holt et al. (2001) found externals, who believe there is nothing they can do to alter their body shape, tended to experience greater body dissatisfaction, and perceive discrimination from others regarding their weight.

The present research therefore, seeks to explore the ways in which various perceptions of control and agency may be implicated in the believability judgements. More recently, consumption as a means of obtaining mastery or control, to provide consumer agency has been advanced (Otnes, et al., 2014). Product agency benefits, especially those which are goal directed, enable consumers to become empowered, or attain their own sense of agency, or control over themselves, as they work towards their goals (Otnes et al., 2014). However, the majority of existing consumer behaviour literature on weight loss and control has been
approached in experimental settings using student samples, who may or may not be interested in weight loss, and has largely focussed on understanding micro, psychological self-control and self-regulation mechanisms (e.g., Baumeister, 2002; Redden & Haws, 2013). It is important to consider how these influence believability judgements in order to add to the relatively small but developing literature considering how personal agency may interact with product or object agency (Epp & Price, 2010; Otnes et al., 2014).

3.2 Part 2: Consumer Believability – Theoretical Background

The second part of the literature review concerns theoretical aspects of consumer believability judgements, the appraisal theory underpinnings, and the related concepts of hope and scepticism.

3.2.1 What is Believability?
Believability is defined in the Oxford Dictionary (2015) as “that which is able to be believed or is considered realistic or convincing”. It is derived from the verb ‘to believe’ which means “to accept that (something) is true, especially without proof”, and implies a personal judgment where there is a degree of uncertainty, rather than ‘true’ knowledge. Stemming from Aristotle’s examination of rhetoric, understanding whether or not people find information to be truthful, believable, credible or convincing is seen as central to the communication of information (Delia, 1976; Garver, 1994; Rieh & Danielson 2007). References to believability are found in disciplines such as the Law (Shuman, Champagne & Whitaker, 1996), Psychology (Hasson & Johnson Laird, 2003), Education (Bachor, 2002), Journalism (Robinson, & Kohut, 1988) and Artificial Intelligence (Bates, 1994). In psychology, believability has been shown to represent a highly personal and subjective assessment or conclusion that is linked with prior beliefs (Hasson & Johnson-Laird, 2003; Trippas, Handley, & Verde, 2013).

References to believability are abundant in the marketing and consumer behaviour literature, where believability is a summary construct of interest to gauge responses to marketing communications. However, whilst the construct has been developed as a quantitative measure for advertising and new concept testing practice, available definitions and conceptualisation are limited, and there is difficulty in clarifying what consumer believability is.
3.2.2 A Twisted Heritage

The interrelated concepts of credibility and believability emerged in parallel to capture individuals’ evaluations of information, and to measure the degree to which persuasion had occurred. Although differences in researcher perspectives for the two constructs are apparent, interchangeability between believability and credibility is observed within the marketing and consumer behaviour literature. The terms are often overtly conflated in definitions, frameworks and operationalisations. For example, Mackenzie and Lutz (1989) in their Attitude to the Ad construct, used truthfulness and believability as items to measure advertising credibility, whereas Beltramini (1982) used credibility as an item in his Perceived Advertising Believability scale.

The theoretical basis for credibility largely developed from communication (Hovland, Janis & Kelley, 1953), and Yale attitude and persuasion models (McQuire, 1963). The models served as a framework for the study of communication by identifying elements such as the communication source, message, receiver and context. From this, credibility, as a perceived characteristic of the source, has received considerable attention (Pornpitakpan, 2004; Rieh & Danielson, 2007; Wilson & Sherrell, 1993). Much has been achieved in crystallising the source factors which drive higher credibility for an item, such as expertise, trustworthiness and source attractiveness (Hilligos & Rieh, 2008; Ohanian, 1990). Credibility is also viewed as an inherent part of the seminal model in the persuasion literature, the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986). Under certain conditions of low motivation or low ability to process information, perceived source credibility is thought to serve as a peripheral cue by which receivers make judgments about a message, without centrally processing the argument’s strength. Whilst, it is clear that credibility is a valued asset for marketers (Baek & King, 2011; Erdem & Swait, 2002), overall, the stream of credibility research in marketing is largely characterised by a focus on the information source, undertaken using a positivist and reductionist approach. Research interest continues into how to enhance credibility (e.g., Eisend, 2006), including the credibility properties of brands making health claims (Kemp & Bui, 2011). However, authors have long noted that ‘receiver’ or individual characteristics often remain unexplored (Delia, 1976; Hilligos & Rieh, 2008).
3.2.3 Believability as Marketing Construct

Historically, in contrast to the credibility stream, believability researchers have attempted to measure a more subjective view of what a consumer takes from a message. This has included the extent to which a consumer accepts the message as it was intended (Beltramini 1988; Maloney 1963), and whether the message is perceived as truthful and convincing, or exaggerated and untrue (Oehler, 1944). After an analysis of advertising research, Maloney (1963) concluded that, counter to advertising theory of the time, believability was not a necessary step in building an effective advertisement. Rather, the acceptance of the message was easier for consumers when it related to their existing beliefs which were affected by individual difference levels. Despite this observation, the general consensus remained that believability was a persuasive step consumers must pass through between comprehension and acceptance, so that the consumer’s views would match the marketer’s, meaning a more influential message was transmitted (Beltramini, 1988). The few available definitions which are available depict believability as a level of acceptance due to perceived truthfulness. For example, Beltramini (1982) defines ad believability as “the extent to which an ad evokes sufficient confidence in its truthfulness, to make it acceptable to consumers” (p.1).

Specific believability scales (Beltramini, 1982; Bruner et al., 2001; Gurhan-Canli & Maheswaran, 2000) are utilised in health related contexts, for example, public health warnings (Beltramini, 1988, 1982), nutrition information (Beltramini, et al., 2000), seals of approval (Beltramini & Stafford, 1993), direct to consumer prescription drugs (Beltramini, 2006), pricing levels (Suter & Burton, 1996), research results in advertising (Beltramini & Evans, 1985), over the counter medications (Atkin & Beltramini, 2007) and advertising puffery (Haan & Berkey 2002). On examination, the scale items are targeted to measure source aspects such as trustworthiness, and credibility, as well as the degree to which information is found convincing and realistic (Beltramini, 1982), or acceptable (Gurhan-Canli & Maheswaran, 2000). Across the variety of studies which utilise and adapt these scales, conceptualisation is often not clear and the focus remains on the credibility properties of the source and the information itself (e.g., Berry & Shields, 2013).

In new concept research practice, believability also receives attention. Along with other evaluative measures such as consumer acceptability, understanding, liking and purchase/trial intention, believability is recommended as an overall indicator of new product potential and market volume (Chapman 1988; Peng, Cui & Li, 2012; Lord, 2007; Moskowitz et al., 2008;
Peng & Finn 2008; Teratanavat, Jeltema, & Plunkett 2012; Wind, 1973). Measuring believability is recommended by the authors across the varied stages of the development process, from initial screening, to closer to market activities such as positioning and segmentation decisions, although managerial practice is thought to primarily favour intentions as a proxy measure for adoption behaviour (Arts, Frambach & Bijmolt, 2011). This is despite the debate on the predictive ability of consumer intention responses for adoption behaviour for new products, due to the inability of consumers to be able to anticipate unexpected events that influence the purchase decision (Chandon, Morwitz & Reinartz, 2005; Morwitz, Steckel & Gupta, 2007). Overall, whilst empirical research using believability measures in new concept applications undoubtedly exists in the practitioner domain, it is sparse in the academic literature, and in this respect, believability is under researched in the theoretical literature as a concept testing construct where credence aspects are implicit in the judgement.

3.2.4 Exploring Consumer Believability Judgements

The current research exploration complements a longstanding tradition of research into measures of outcome expectations (Ajzen, 1991; Feather, 1982; Oliver & Winer, 1987; Rotter, 1966). The links between the psychological constructs of people’s beliefs and their ensuing intentions and behavioural actions have been central to much previous consumer behaviour and health psychology research. Arising primarily from social psychology, models such as the Theory of Reasoned Action, the Theory of Planned Behaviour, and the Health Belief Model, have been widely applied and refined (Ajzen, 1991; Fishbein & Ajzen, 1975, Rosenstock, 1974). Whilst these theories have provided a guiding framework, they have received criticism for their heavy reliance on the rational aspects of human behaviour which in some cases is thought to be amplified by the questionnaire items themselves and confounded by a participant’s desire to appear logical (Ogden 2003). In wider reviews and meta-analyses (Carpenter, 2010), inconsistent effects are reported. Their predictive power appears weaker for weight loss behaviours despite considerable empirical attempts to use the model (e.g., Schifter & Azjen, 1985). The long term adjustments and processes needed for continuing weight maintenance, motivational aspects, the role of habit, and the non-volitional aspects of the behaviours explain this lack of predictive ability to a degree (Bagozzi & Edwards, 1998). Other factors such as previous weight loss difficulties, the time frame concerned, and the degree of obesity/overweightness need consideration (Abraham, Sheeran & Johnston, 1998). New studies attempt to add new moderators to enhance predictability, and
a debate continues in health psychology as to whether emotions are implicitly included (Ajzen, 2014; Conner, 2015; Sniehotta, Presseau & Araujo-Soares, 2014). In short, the cognitive decision models, due to their reductionist aims, whilst providing insight from a cognitive perspective, present an ordered and simplified process of the way in which consumers may form judgments about personal expectations.

Consumer believability in contrast, is being explored as a way of providing insight into the varied aspects of the initial response, to supplement research which has previously had an attribute or source focus. Consumer believability is defined as the subjective judgement of whether a consumer believes that the proposed food product concept will work for oneself, according to its promised benefits. The focus for the research is on obtaining deeper insight into consumer based interpretations of whether the proposed foods are a believable means for achieving a personal outcome, and in understanding what believability means to consumers. Weight loss has been shown to be an activity of high involvement for many women reflecting their inherent personal needs, values and interests (St James et al., 2011; Zaichkowsky, 1985). It therefore carries with it the expectation of more valuable gains, or more painful losses. For some women, this uncertainty may elicit feelings of hope, whilst others may be less positive (Johnson & Stewart, 2005).

3.2.5 Appraisal Theory

Appraisal Theory was drawn upon initially as an established psychological framework which links cognitive and emotional aspects of judgements, and provides theoretical explanation for the elicitation of complex emotions like hope (Lazarus, 1999). Appraising is a psychological process where individuals make sense of personally relevant information, and assess its significance for their wellbeing in terms of their goals, beliefs and resources, and elicit emotions accordingly (Johnson & Stewart, 2005; Moors, Ellsworth, Scherer & Frijda, 2013). The theory has been referenced previously as a framework to conceptualise hope (MacInnis & de Mello, 2005), and is viewed as having productive application in understanding consumer new product evaluations (Johnson & Stewart, 2005). In contrast to previous theories of emotion which attempt to label emotions (e.g., Plutchik, 1982), appraisal theorists are interested in categorising the dimensions of a personally relevant event that give rise to emotions (e.g., Ellsworth, 2013; Frijda, 1993; Lazarus, 1991a, 1991b; Moors et al., 2013; Roseman & Smith, 2001; Scherer, 2005; Smith & Ellsworth 1985).
Key dimensions have been identified as goal congruence, moral compatibility, agency and uncertainty (Johnson & Stewart, 2005). The degree to which an item is perceived as enabling goal progress is theorised to elicit different emotions than if the item is seen to be incongruent. A motivational component has also been implicitly recognised by the appraisal theorists, where goal significance (Scherer, 2005), focality (Frijda, 1986), appetitive/aversive motives (Roseman, 1984) and importance (Smith & Ellsworth, 1985) have all received conceptual and empirical support as appraisal dimensions. Agency is also a key dimension where individuals are thought to appraise the causality and roles played by the self, other people, or the possible contribution of products/services (Johnson & Stewart, 2005; Lazarus, 1991b; Smith & Ellsworth, 1985). Appraisals of goal congruence and uncertainty have been shown to arouse hope or disappointment, which are likely to have heightened influence in consumer decision making regarding the meaningful outcome of weight loss activities (MacInnis & de Mello, 2005; Smith & Ellsworth, 1985). Interestingly there is overlap between the appraisal dimensions and social cognitive models, adding support to both theoretical areas. One central and continuing debate concerns whether appraisals are at first cognitive, or emotional, and there are definitional issues regarding how each state is defined (Frijda, Manstead & Bem, 2000; Lazarus, 1999; Levenson 2011; Zajonc, 1980). Whilst this debate lies far outside the scope of the present study, the assumption for the research is that cognitive or emotional aspects of believability judgements are individually experienced and may simultaneously involve complex and interwoven cognitions and emotions.

3.2.6 Biased to Believe?

Across the relatively small body of empirical studies which attempt to gauge consumer believability, some interesting patterns emerge. The personally motivated nature of the responses is evident in several studies. O’Cass & Griffin (2006) found that personal relevance and involvement influenced whether social issues would be believed. Andrews et al., (1991) revealed that frequent alcohol users found alcohol warning labels to be significantly less believable than occasional/nonusers of alcohol. Similarly, cannabis users only slightly believed warning messages about cannabis, whereas non-triers found the warnings to be believable (Jones & Rossiter, 2004). Although reported, this tendency to show a motivated ‘bias to believe’ has not been closely explored using in-depth interviews, with the exception of Mason & Scammon (2011). They showed that individuals using health supplements interpreted the messages in a more hopeful manner, consistent with personal directional goals.
for supplement use. However, what was underlying and motivating their directional goals was not elaborated upon in this research.

Extensive literature from behavioural decision theory points to the systematic, yet unconscious, cognitive biases that influence thoughts and behaviour (Kahneman, 2011). Based on the original thinking of seventeenth century philosopher Benjamin Spinoza (as cited in Gilbert, 1991), information is received and then only disbelieved if the individual, due to compelling arguments, actively needs to disbelieve the information. Kahneman (2011) cites empirical evidence over several decades to support this view. In the dual processing models, believing is viewed as an automatic intuitive process, where people jump to conclusions on the basis of limited information. In contrast, doubting and unbelieving is an effortful procedure (Kahneman, 2011). People are known to suppress doubt and evoke ideas which are compatible, with the interpretation of information thought to be influenced by our available existing beliefs (Shermer, 2011). As Koslow and Beltramini (2002) conclude, after their experimental study of pharmaceutical advertising information processing, it appears easier to believe advertising information. However, as will be shown in the next two sections, the literature indicates that, whilst there is evidence of hopefulness in personal consumption activities, there is also a prevailing tendency to develop scepticism. The way in which consumers may resolve these opposing forces is of considerable interest for the research at hand.

3.2.7 The Role of Consumer Hope

Hope has been identified as an emotion associated with uncertain consumer choices (Bagozzi, Gurhan-Canli & Priester, 2002; MacInnis & de Mello, 2005). Hope is a fundamental and generally positive aspect of human life (Averill, Catlin & Chon, 1990; Belk, Ger, & Askegaard, 2003; Wiles, Cott & Gibson 2008). If hope is not present, there can be disappointment and/or despair, fear and anxiety (Lazarus, 1999; Stotland, 1969). Regarding an uncertain outcome, hope can be characterised by both the holding of realistic and unrealistic expectations (Wiles et al., 2008). Hope’s presence is likely to be delicately interwoven with an initial believability judgement, and it was seen as important to attempt to further unpack and understand this possible relationship.

Distinctions are made between hope and other related constructs. Hope is seen as a specific state regarding the personal attainment of a particular goal and in this way differs from
optimism which is regarded as a personal trait generalised across situations (Alarcon, Bowling & Kharzon, 2013; Bryant & Cvengros, 2004; Stotland, 1969). People who perceive themselves as more hopeful have been shown to produce more coping pathways and this optimism seems to convey an advantage in many aspects of life (Snyder, 1994). Distinctions can also be made between hope, and the concept of desire (Belk et al., 2003), which can mean a loss of control. Wishing and magical thinking convey a sense of fantasy, and are not always future focussed, and thus, distinct from hope (MacInnis & Chun, 2006). Overall, the underlying presence of hope is thought to powerfully influence and bias cognitions about intended goals, especially when they are personally important (Kunda, 1990; Lazarus, 1999), making it an important concept for consumer researchers.

The consequences of hope are normally viewed as positive and productive. It has the power to energise and empower and offer a new perspective (Stephenson, 1991). However, the presence of hope may also lead to biased thinking. For example, hope may lead a consumer to invest in higher levels of spending, and/or the adoption of radical remedies with little scientific evidence, like diet suppressants (MacInnis & Chun, 2006). Considerable anecdotal evidence also supports the level of risk that consumers can tolerate for motivations associated with the yearning component of hope. For example, activities to improve appearance such as plastic surgery, the use of botulism, silicone implants, and crash diets are thought to alter consumer’s perceptions of the risk-reward trade-off (MacInnis & de Mello, 2005). In certain instances the presence of hope leads consumers to engage in biased processing, such as positive misinterpretation, selective focussing/attending and enhancement of a product’s ability to achieve the desired outcome. This is theoretically explained by motivated reasoning theory (Kunda 1990), which accounts for the way in which individuals attempt to believe what they want to believe, but must do so within the confines of their existing beliefs. They may adjust their beliefs, and hence, the concept has high relevance to the present research.

Hope theorisation is emerging in the consumer literature, where it is defined as a future focussed emotion which involves the capacity to look to the future and aspire to a desired end (MacInnis & Chun, 2006). Belk et al., (2003) give emphasis to the powerful underlying role of hope in our lives. “It is through hope and its accompanying suspension of cynicism and disbelief that we create that excited, if ultimately illusory state of anticipatory desire that sustains and nourishes us” (p.102). Researchers distinguish between the finer facets of the hope construct, including the emotional state of hope itself, which relates to yearning for
something, and the condition of being hopeful, when a goal congruent outcome seems possible (de Mello & MacInnis, 2005). Many consumer decisions are thought to be aspirational, and appeals to hope by marketers are common in the marketplace, particularly those promising improved appearance and/or regained youthfulness and weight loss (MacInnis & de Mello, 2005). Hope, or yearning, may also relate to a perceived personal deficiency, where the outcome may be outside one’s personal control (MacInnis & Chun, 2006). Hope appeals are therefore made on several levels, from the concrete hope for a product, to abstracted hoped-for outcomes, and hoped-for selves (MacInnis & Chun, 2006; Patrick, MacInnis & Folkes, 2002). Several studies confirm the influential role that hope can play in consumption. For example, de Mello, MacInnis & Stewart (2007) found using an experimental design that individuals who felt that hope was low, engaged in motivated and more positive reasoning with regard to products that claimed to boost memory. Kemp et al., (2015) revealed that consumers with serious illnesses were more likely to respond to advertising using hope appeals which cultivated trust, and noted the vulnerability of health care customers.

Increasingly studies are investigating the commanding importance of hope in the context of women and weight loss. St James et al. (2011) in their in-depth study of women’s’ weight loss experiences found magical thinking to be a means of coping with the complexities and stresses of cultural expectations around weight loss and wider notions of control. Consumers used magical thinking to create a space of uncertainty that makes weight loss seem possible, thereby sustaining hope towards their goals. Aligned to this, hope has also been studied as a collective cultural force cultivated and embodied by the Weight Watchers brand. The collective processes of the Weight Watchers brand are viewed as associated with salvation, which enables it to cultivate hope amongst its users (Beruchashvili et al., 2013).

Therefore, the literature indicates the potentially profound importance of hope in the consideration of future consumption, especially in the present context. The presence of hope would seem to constitute an underlying and even unconscious force which influences and gives meaning to a decision to believe or ultimately try a new weight loss option. However, there remains considerable work to be done to augment and extend this initial theorisation for hope as a self-generated emotion. So far, conceptualisation of consumer hope has used a cognitively dominant information processing approach to theorise hope’s role within the attitude formation process. MacInnis and de Mello (2005) conceive that the presence of hope
plays a moderating role in high involvement situations, depending on the amount of hope that is held. They posit that high hope leads to confirmation biases, whereas weak hope leads to more systematic and merit-based evaluations. Hope and the expectancy of an outcome have been theorised to be two distinct yet related states (MacInnis & de Mello 2005). However, this research seeks to explore how these are closely interrelated in participant’s minds, and that hope, for some consumers may be indirectly implicated in the formation of a believability judgement. Gaps are evident in understanding the way in which hope arises in the first instance, and the ensuing influences that it has on trial and consumption.

3.2.8 Consumer Scepticism
In contrast to the seemingly positive and emotional force of hope, scepticism is viewed in the literature as a negative influence on consumption practices. As discussed, scepticism is a construct of interest in the health claim and functional foods literature, and its possible presence may serve as a source of individual variance in the believability judgement. Scepticism is defined in the Shorter Oxford Dictionary (2007) as: “doubt as to the truth of some assertion or apparent fact”. It is largely viewed as a personal trait, or tendency to be disbelieving, driven by increasing age and personality factors related to cynicism and higher self-esteem (Prendergast et al., 2009). Scepticism is thought to develop as part of a socialisation process in response to overtly persuasive consumption environments (Annunziata & Vecchio, 2011; Obermiller & Spangenberg 2000, 1998; Thompson, Pollio & Locander, 1994). Tan & Tan, (2007) revealed higher self-confidence drove higher scepticism for health claims in a study of Singaporean consumers. Consumers have been shown to be sceptical of marketing and advertising in general (Koslow & Beltramini, 2001; Obermiller & Spangenberg, 1998), and to respond in ways to counteract these influences. The filtering of marketing information is well documented, using models such as The Persuasion Knowledge Model (PKM) (Friestad & Wright, 1994) which indicates consumers are aware of the persuasive, manipulative, and perceived ulterior motives of marketers. Darke and Ritchie (2007) revealed the defensive position that consumers use to protect themselves from being deceived, and postulated that a self-protection heuristic operates to automatically build against the risk of deception. This process has been shown to be highly flexible and easily reversed if positive heuristics, such as supportive details, also come into play (Amos & Grau, 2011). However, whilst consumers can be sceptical, they do not always cognitively evaluate, and the usage of heuristic cues is frequently observed (Obermiller, Spangenberg & MacLachlan, 2005).
Consumer scepticism for specific product claims has also received some attention. Morel & Pruyn (2003) showed that consumers were pre-attitudinally biased towards disbelieving product claims, but this bias could be overcome if evidence was convincing. This is despite contradictory results regarding the role of scepticism on evaluation of the claims. For example, several studies have shown that consumer scepticism negatively influences consumer responses to food labels (Fenko et al., 2016; Tan 2002; Tan & Tan, 2007), yet prior studies for health claims suggest that sceptical users were just as likely to take note of the information (Mazis & Raymond, 1997; Szykman, Bloom & Levy, 1997). As discussed in the previous chapter, despite empirical evidence and acknowledgment that consumer scepticism regarding health claims is intensifying, an understanding of the underlying reasons behind why this is happening is less clear.

In exploring the believability response to the proposed foods concept, therefore, a wider consideration of the consumer experience of scepticism and possible consumer doubt appears important. Uncertainty and doubt regarding future consumption in other contexts have been shown to lead to delay in purchase decisions (Hassan, Shaw, Shiu, Walsh & Parry, 2013; Saaksjarvi, & Morel, 2010; Urbany, Dickson & Wilkie, 1989). Uncertainty can lead to compromised beliefs and negative emotions such as frustration and helplessness (Hassan et al., 2013). It is possible that scepticism may be implicated in the believability response as a possible counterbalance to the role of hope, and it is important to further investigate these potentially influential aspects of the response.

3.3 Research Gaps Summary and Research Questions

The literature review revealed important knowledge gaps for further exploration in the present study. These are summarised below and linked to the three overarching research questions which address them. The overarching gap identified for the research lies in understanding how consumers make believability judgements for functional foods. As they offer credence or experience benefits, consumers are theorised to make a preliminary judgement as to whether or not they believe such foods will work for them. The literature review, however, showed clarity was lacking over the believability construct itself. There is not a clear understanding of what believability is, and what it means to consumers. Collectively the empirical believability research indicated the personally biased nature of
believability responses within health research, and the concepts of hope and scepticism were identified as being potentially implicated in the judgements. It was therefore seen as important to understand aspects of the process by which the judgements are made. The first research question was therefore exploratory and asked:

RQ.1: How do women, seeking weight loss, judge whether they believe the weight management concept will work for them?

A related and more specific gap was identified in understanding how the participant’s believability judgements were related to their future behavioural intentions. Previous research, although sparse in the context of functional foods, indicates a moderate to low association for foods with health claims, but the reasons for this disconnection have not been explored, and this relationship for weight loss activities in general as yet is surprisingly under researched. It was not assumed or expected that the relationship would be straightforward. Hence, the second research question asks:

RQ.2: How are the believability judgements linked with behavioural intentions to try the foods?

The review also identified important underlying socio-cultural consumer influences which may drive the believability judgements. The important roles of personal motivations, and identity constructions were reviewed as important influences. Similarly, understanding the ways in which consumers recognise and regard control within their own lives and their health has been previously touched upon for functional foods. However, there are gaps in understanding how consumer’s perceptions of their personal control links with the potential benefits of a functional food concept. This lead to the development of the third research question:

RQ.3: What influences the women’s believability judgments?

3.4 Chapter Summary

The chapter commenced with an overview of literature concerning the context of weight loss activities. It showed current understanding of the way in which weight loss activities are understood, and the motivations and challenges faced, in particular, by women. In doing so, the relative scarcity of research into consumer attitudes to weight loss activities and products was revealed. In the present context, the external and internal influences upon believability
judgements are acknowledged to be extensive. In understanding why women may make fundamentally different believability judgements for the proposed satiety foods in question, theoretical consumer behaviour concepts capturing aspects of personal and socio-cultural meaning were introduced in this chapter. The second part of the literature review chapter concerned the consumer believability construct. It outlined how it was currently utilised, and the lack of understanding for what it means from a consumer perspective. The appraisal theory framework was overviewed. Literature on the relevant concepts of hope and scepticism was also reviewed to provide understanding of what is known and not known regarding their potential implication in the judgements. The concepts identified in this chapter are more fully discussed and integrated in the findings and discussion chapters which follow.

The next chapter concerns the research approach used to address these research questions. The need for an interpretive focus has been made clear in the present context, which has previously been dominated by the use of social cognitive models and largely survey or experimental approaches.
Chapter Four: RESEARCH APPROACH

This chapter outlines the overall research approach taken for the study. It provides the overarching philosophical perspective and assumptions of the research. The research used a qualitatively dominant mixed methods methodology which combined quantitative and qualitative data. Firstly, the chapter recaps the research aim and overviews the methods used in each study. The chapter then attends to the overarching philosophical issues for the research of ontology, epistemology, and the theoretical perspective. It then justifies the use of the mixed methods approach. Finally, the assumptions of the research are provided. Full details of the particular method for each study are provided in the relevant chapters which follow.

4.1 Research Aims

The aims which guided this study was to gain insight into the way in which women seeking weight loss made believability judgements for the proposed concept, and to understand what influences this response.

4.2 Research Design Overview

The exploratory research consisted of three independent studies which are overviewed in Figure 4. Each study focused on addressing aspects of the research questions into consumer’s perceived believability judgements for the same phenomenon of interest. The findings from the initial phases of the study guided the design of the subsequent studies. The research evolved from an initial benchmarking survey of response ratings, to a focus on interpreting participants’ sense–making in relation to their historical and current weight loss activities. The findings from each of the individual studies, although analysed individually, were interpreted and integrated to provide an overall summary for the work.
Figure 4: Overview of the Studies

Study 1
Method: On-line Questionnaire
N= 601
Participants: Urban Australian Women aged 35-64 years
Selection Criteria: Currently attempting to lose weight

Study 2
Method: In-depth Interviews
N= 14
Participants: NZ Women aged 30-62 years
Selection Criteria: Currently attempting to lose weight

Study 3
Method: Rep Grid Interviews
N=10
Participants: NZ Women aged 30-58
Selection Criteria: Interested in and/or attempting weight loss

4.3 Philosophical Perspectives

This section considers the overarching philosophical underpinnings for the research. They have a direct bearing on the framing, data collection methods and interpretation of the findings, and clarify what kind of evidence is required, how it will be analysed, and interpreted (Blaikie, 2007). The framework of Crotty (1998) is commonly used to provide an overall position. It has been favoured for its comprehensiveness, clarity and ability to aid articulation of the research assumptions. It must be noted that Crotty’s (1998) classifications are one of a large range of possible categorisations used in the research philosophy literature. Also, although ontology and epistemology are seen as interwoven by Crotty (1998), they are considered separately here for additional clarification of the overall researcher position. Table 1 summarises the overall research approach for the thesis, and the following sections discuss the researcher position.
Table 1: Summary of the Research Approach

<table>
<thead>
<tr>
<th>Theoretical Orientation</th>
<th>Researcher Approach</th>
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<tr>
<td>Ontology</td>
<td>Relativism</td>
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<td>Epistemology</td>
<td>Constructivism</td>
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<td>Theoretical Perspective</td>
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<td>Methodology</td>
<td>Mixed Methods (Qualitative dominant)</td>
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<td>Methods*</td>
<td>On-line Questionnaire (Study 1)</td>
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<td></td>
<td>In-depth Interviews (Study 2)</td>
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<td></td>
<td>Repertory Grid Interviews (Study 3)</td>
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* Full details are provided in the relevant chapters which follow

4.3.1 Ontology- Relativism

Ontology, a term from the metaphysics branch of philosophy, is concerned with the nature of reality, what the world is, and what exists in it (Flew, 1984). It provokes fundamental questions for social researchers about how to view the world (Bryman, 2012; Lincoln & Guba 1985). For example, is there a singular external reality (outside the mind) waiting to be discovered and/or measured? Or are there only subjective experiences (internal and mind dependent) arising from people’s perceptions of the world? From a research perspective, the ontological position clarifies where the research fits on a continuum between a realist position, where the research aims to measure the properties of something which is part of an objective reality, or an idealist position, where it explores a constructed reality which requires an understanding of subjective experiences, contextual factors, and the changing nature of reality created through people’s interaction with the researcher.

The overall ontological position adopted for this research is relativism. It implies that people have diverse ways of knowing, with different sets of meaning and separate realities (Lincoln, Lynham & Guba, 2011). In this way, people may inhabit multiple possible worlds, and ‘reality’ is an individual’s mental construction. Individuals are seen to make sense of their world by creating theories and categories (Hudson & Ozanne, 1988; Kelly, 1955). This choice of ontological position is a direct result of the nature of the exploration. At the heart of the study lie the thoughts and feelings that occur in the defined context. Believability responses, are subjectively experienced by the appraisers and do not exist as an object of reality for a researcher to uncover. Whilst in the research the concept is quantitatively
analysed in a collective assessment by survey participants (in Study 1), the findings are treated as indications made by participants, and are not intended to be generalizable measurements. This ontological position has been consistently utilised across the three studies that comprise the thesis.

4.3.2 Epistemology- Constructivism

Epistemology, the theory of knowledge is a branch of philosophy addressing questions about the nature of knowledge, how things may be known, and the limitations of knowledge (Honderich, 2005). It helps understand the body of ‘truths’ or awareness that has been constructed by humans (Savin-Baden & Major, 2013). On a research level, epistemology presents a framing for how to inquire about the world and how to generate knowledge (Bryman 2012). It also helps define the relationship between the researcher and the research participant in developing understanding of the phenomenon being studied. Crotty (1998) views the epistemological dimension as a continuum from Objectivism-Constructionism - Subjectivism. Under his schema, constructionism, the middle position, is an overall umbrella concept for the various forms of social constructionism and constructivism.

It is important to make a distinction between constructivism and social constructionism (Raskin, 2002), although the literature presents many different accounts of them both (Bryman, 2012; Lincoln et al., 2011; Schwandt, 2000). Social constructionism primarily concerns the collective influence of shared social forces and culture on meaning. These influences may transcend the life of any one individual, and the constructs that are formed foster understanding between people and within societies. In contrast, constructivism puts the meaning making activity of the human mind at centre stage. The emphasis is on the individual mind rather than the collective generation of meaning as shaped by language and social processes (Crotty, 1998).

Aligned with the ontological stance for the thesis, this research adopts a constructivist epistemological position. Constructivism suggests that ‘reality’ and knowledge reside in the mind of individuals as internal independent human-made constructions (Neimeyer & Raskin 2001; Raskin, 2002). It assumes that people differ in how they experience the world, and that knowledge may be uncovered by helping individuals to unpack their individual experiences. Individuals invent concepts and schemes to make sense of their lives and they modify and test these constructions as new experiences arise (Schwandt, 2000, Kelly, 1955).
The idea that people view the world differently on the basis of the meaning they assign to events in their social lives and physical environments has had a considerable history. Originally, arising from the work of philosopher Immanuel Kant in 1781, who examined the transformative character of the mind and how it imposed spatial, temporal and causal order on the phenomena of experience, the view was further developed as a cognitive learning theory by Piaget (von Glaserfield, 1984). The term constructivism is used on several levels. It has become an overarching epistemology (Schwandt, 2000), a branch of psychology (Raskin, 2002), a methodology (Mir & Watson, 2000) and a research paradigm underpinning qualitative research (Lincoln & Guba, 1985; Lincoln et al., 2011). Several sub-theories of constructivism have been identified by constructivist psychologists (Efran, McNamee, Warren, & Raskin, 2014). The positions range between the extremes of radical constructivism (von Glaserfeld, 1984) which views the individual as a closed system, where the cognising subject actively builds up knowledge, to social constructivism, where the focus is on the impact of social forces and language on constructions (Raskin, 2002). Between these perspectives lies personal constructivism. Personal constructivism, also known as personal construct psychology (PCP), or personal construct theory (PCT), was pioneered by George Kelly (Kelly, 1955). He proposed that people develop personal constructs, or mini systems of judgement to organise and predict their experiences to avoid being overwhelmed (Kelly, 1955). This theory underpins the repertory grid technique used as a method in Study 3 of the research and is further discussed in Chapter 7. A constructivism epistemology was therefore seen as appropriate for the research. It provides a foundation for understanding individual responses and recognises the complex nature of interpretations and behaviours that may be involved in their weight loss activities.

4.3.3 Theoretical Perspective- Interpretivism

Continuing with Crotty’s (1998) framework, the next level for outlining the research position is the theoretical perspective, that is, the overall lens through which we are looking. Here context is given to the methods that are employed and the way in which they are interpreted (Crotty, 1998). The weight loss context for the thesis is known to involve emotional responses and coping behaviours which are impacted by previous experiences of the participants (St James, et al., 2011). The individualised approach to weight loss means that responses to the concept in question are likely to be varied, and need to be integrated with existing activities and past experiences. Gaining an understanding of these aspects of the
response from the perspective of the participant was deemed a priority for the overall research project, and to do this an interpretive lens was adopted.

In general, interpretivism allows an approach which places consumer meaning making at the centre of the study. Because of this, positivist or post-positivist assumptions were not considered as suitable because of their conflict with the overarching philosophy. Although post-positivists accept that the values of the researcher can influence what is observed and seek to eliminate bias by this recognition, there is still a reliance on objectivity and a need to establish the validity of the findings. Several different approaches have emerged as interpretive streams, each having a different focus. They include phenomenology and hermeneutics. The hermeneutic philosophy directs attention to coming to an understanding, which is temporally, socially and culturally bound (Arnold & Fischer, 1994). Because of the different nature of the three studies, a mix of interpretive styles was used:

- Study 1 involved the use of an on-line questionnaire to provide an exploratory and descriptive understanding of consumer responses to the concept. The research questions enquired into how consumers would rate the concept on several response measures and individual differences were explored. The analysis used correlations and comparisons of means, but did not imply causality. Although there was a distance between the researcher and the participant, the results are presented as an interpretation which has application for linkages with the future studies, rather than as generalizable, objective truths with established validity. The use of quantitative data does not need to imply the acceptance of a positivist objectivist, epistemology (Mingers, 2001), and in this way, the method is disconnected from its normal paradigm. As Crotty (1998) states “It is possible for a quantitative piece of work to be offered in a non-positivist form” (p.41). Instead, it is a question of what the reader expects from the findings, rather than whether they were obtained by quantitative or qualitative methods. The data are interpreted in their particular context, with recognition given to the possible ways in which participants were interpreting the questions, and the difficulties implicit in obtaining measures in this way.

- The in-depth interviews (Study 2) began with a focus on the detailed day to day lived experiences of the participant. Because existing personal beliefs, experiences and knowledge are theorised to be integral in assessments of believability, a phenomenological approach was adopted to allow first person description (Thompson, 1997; Thompson, Locander & Pollo, 1989). The interpretation of the interview data
used a hermeneutic approach to interpret the themes of individual meaning in the participant’s stories, and was conducted using an emic approach to bracket out researcher pre-suppositions. Further details of the procedures are provided in Chapter 6.

- Study 3, which involved the use of the repertory grid technique, was interpreted in relation to Personal Construct Theory and personal constructivism (Kelly, 1955). This technique, which is fully described in Chapter 7, provides a holistic understanding of the processes of individual meaning making. The interviews and repertory grids derived by the participants were interpreted using a predominantly qualitative analysis.

4.3.4 Methodology- Mixed Methods

In this section the focus is on describing how the inquiry proceeded. It attends to the strategy, plan of action, or design lying behind the choice of the particular methods, and how this choice links to the desired outcome (Crotty, 1998). The three studies used different methods combined in a methodology known broadly as Mixed Methods. Mixed Methods research is an evolving approach with many definitions, and levels of specificity. Mixed methods research is “an approach to knowledge (theory and practice) that attempts to consider multiple viewpoints, perspectives, positions, and standpoints (always including the standpoints of qualitative and quantitative research)” (Johnson, Onwuegbuzie, & Turner, 2007, p113). Such studies are commonly found in health research, especially health psychology where understanding is often required to inform policy and practice at both the individual and the population level. In business, and specifically marketing and consumer behaviour research, there is now a continuum of studies combining both qualitative and quantitative methods (Bahl & Milne, 2006). Researchers in many domains increasingly embrace methodological pluralism and analytic techniques to advance the theoretical agenda (McQuarrie & Mick 1992; Moore & Lutz 2000). As acknowledged by Crotty (1998): “We should accept that, whatever research we engage in, it is possible for either qualitative methods or quantitative methods, or both to serve our purposes” (p. 15).

4.3.5 Justification of the Methodology

The trend towards using a mixed methods methodology comes from an increasing recognition that mixed methods research enables richness for the understanding of consumer phenomena (Rapp & Hill, 2015). It initiates new perspectives about the phenomenon of the
research which gains a confirmation of findings (Creswell & Clark, 2007). In the overall study of food consumption, new methodological approaches which consider the individual specificity of food choice and explore the lived experiences of consumers are important. The use of a mixed methods methodology was seen as highly appropriate and justifiable for the problem orientation and research question. The multi-dimensional nature of believability responses required a flexible and holistic exploration. The exploratory orientation of the thesis required some initial quantitative indication of the overall response to the positioning concept, in terms of individual differences and the relationships of the key constructs. The qualitative methods then provided access to individual constructions and underlying processes of the response, allowing a synergistic outcome, which could not have been achieved using a single method approach.

Because mixed methods studies combine data across methods, special attention needs to be paid to the articulation of the overriding epistemology which has been addressed in this chapter. Debate has emerged over whether it is possible and/or appropriate to combine data if they arise from fundamentally different, and for some authors, incommensurable philosophical positions (Bryman 2008; Lincoln, et al., 2011; Onwuegbuzie & Leech, 2005; Sale, Lohfeld & Brazil, 2002). The literature offers several options for researchers (Creswell & Clark, 2007; Tashakkori & Teddlie, 2010). These include adopting a single world view approach, such as pragmatism and choosing “what works” to avoid the overarching issues relating to ontology and epistemology (Feilzer, 2010; Johnson et al., 2007). Alternatively, researchers can recognise that different paradigms exist within mixed methods studies and use a combination of perspectives, adopting the assumptions that relate to each method of data collection (Tashakkori & Teddlie, 2010). However, this again poses issues with the overall epistemological approach and clarity for the reader.

To address these issues in the present enquiry, the constructivist approach as described above, was taken across all the studies, enabling a consistency of approach to be maintained. The guiding research questions were formulated to be interpretive to frame the data collection across the three studies. This then allowed common themes and descriptive findings from across the studies to be combined in the final interpretation phase, thereby providing a synergy for the thesis.
4.3.6 Trustworthiness Procedures

The research involved procedures to best ensure trustworthiness, and these are discussed in the relevant chapters for each study. The researcher attempted to remain as neutral as possible in an area of personal involvement and interest. Throughout the fieldwork and analysis stages the researcher co-ordinated with the principal supervisor. The coding of initial themes in the two qualitative studies were independently established and then discussed to develop common themes. For mixed methods researchers, developing pre-conceived notions during the progression of the studies is an acknowledged issue (Savin-Baden & Major, 2013). In conducting the review and research, the researcher was mindful of this and strived to maintain openness to new themes from each study. The final discussion section, where findings were compared for similarity and for their contradictions, allowed the data arising from the different methods to be considered in more than one way.

Ethical considerations were given prioritisation to protect the participants from the possible consequences of their involvement in the study (Miles & Huberman, 1984). Participants were advised of the purpose of the study prior to their involvement and this was also explained by the researcher at the beginning of each interview. They were assured of their anonymity. Given the potentially sensitive nature of the enquiry, participants were advised that they could stop the interviews at any time and still receive their thank you payment. This did not occur in any of the interviews. If necessary, access to the University of Auckland counselling services was available for the participant if issues were raised. For each study ethics consent was obtained prior to the commencement of the fieldwork from the University of Auckland Human Ethics Committee (see Appendix A: Letters of Ethics Approval).
4.4 Research Assumptions

The assumptions of the research have been compiled from the work of researchers advocating a naturalistic inquiry (Lincoln & Guba 1985; Schwandt, 2000). The assumptions are:

1. There are multiple realities which are individually constructed, rather than one knowable ‘truth’. The phenomenon under exploration is not independent and cannot be predicted. The epistemological assumption is made that individuals have different experiences and viewpoints, but these personal differences can be described, discussed and to some extent quantified, as long as assumptions are clearly provided.

2. There is an interaction between the researcher and the research participant and knowledge is constructed in this process. It is important for the researcher to be receptive to the participants’ meanings as they are built up from the different methods and the meaning is created as part of the research. In this way there is a shared meaning, and knowledge is constructed as an active process. Because of this, a constructivist researcher needs to be especially careful about reflecting their own beliefs in the research.

The research is contextualised and not intended to be generalised across contexts. The research does not claim to have predictive power, causality or generalisability.

4.5 Chapter Summary

This chapter outlined the philosophical foundations for the research and the overriding epistemological approach of constructivism, using a mixed methods methodology. The nature of the context with its complex interactions between socio-cultural and psychological factors required an approach which allowed flexibility in exploring individualised responses without imposing structure. The constructivist approach was justified across the three studies as it allows a theoretical interpretation of the findings from across the studies, from the quantified responses in Study 1, to the emergence of both content and process in the participant’s believability responses in the following two studies. Full details of the method of each of the studies are provided in the relevant chapters which follow, including the procedures used to ensure the research trustworthiness of each study.
Chapter Five: STUDY 1

The first study was conducted in June 2012, with the aim of obtaining preliminary indications of the response to the proposed foods concept. In doing so, it scoped for promising research angles for deeper exploration in the subsequent qualitative research. The study used an online questionnaire method and the participants were Australian women, aged between 35 and 65 years, who were currently attempting to lose weight. As will be discussed, the questionnaire design was guided by a preliminary pilot study and prior literature including concept testing approaches and procedures (Lees & Wright 2004; Moskowitz et al., 2008; Peng et al., 2012; Peng & Finn, 2008). This chapter has five sections commencing with the development of the research questions, followed by details of the method, presentation and initial discussion of the results, and the limitations of the study.

5.1 Study 1- Research Questions

The six research questions developed for Study 1 and their linkages with the overall research questions are shown in Table 2. The rationale for their development is outlined below.

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Overall RQs Addressed</th>
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<tbody>
<tr>
<td>RQ.1.1: To what extent do women, seeking weight loss, rate the concept of foods with a hunger control benefit as believable to them?</td>
<td>RQ.1</td>
</tr>
<tr>
<td>RQ.1.2: To what extent do they rate the concept as ‘too good to be true’?</td>
<td>RQ.1 &amp; 3</td>
</tr>
<tr>
<td>RQ.1.3: To what extent do the responses indicate hopefulness or firm belief that the concept will work for them?</td>
<td>RQ.1</td>
</tr>
<tr>
<td>RQ.1.4: What is the relationship between the ‘believability for self’ responses and women’s beliefs and ideas about weight loss?</td>
<td>RQ.1 &amp; 3</td>
</tr>
<tr>
<td>RQ.1.5: What is the relationship between the ‘believability for self’ and intention to try responses?</td>
<td>RQ.2</td>
</tr>
<tr>
<td>RQ.1.6: What are the relationships between ‘believability for self’ responses and individual differences pertaining to a) general, and b) weight loss characteristics?</td>
<td>RQ.1 &amp; 3</td>
</tr>
</tbody>
</table>
RQ.1.1: To what extent do women, seeking weight loss, rate the concept of foods with a hunger control benefit as believable to them?

The starting point for the research was the establishment of quantitative benchmark indications of believability responses. These have not previously been assessed in this way and it was important to collect a description of the response and understand the variance amongst participants. The initial exploration collected measures for believability in two ways. Firstly, established operationalisations from the literature for a combined credibility/trustworthiness/believability scale item were obtained (Beltramini, 1982; Bruner et al., 2001; Gurhan-Canli & Mah, 2001). The second ‘consumer believability’ approach, termed in Study 1 ‘believability for self’, was explored to capture the degree to which the concept of the proposed foods was judged to be believable as a personal weight loss activity. Additionally, by way of comparison, a healthy eating concept was also read and rated by the participants on the credibility/believability/trustworthiness scale. This comparison was included to check the relative differences in the strength of the believability responses for the two different weight loss activity concepts.

RQ.1.2: To what extent do they rate the concept as ‘too good to be true’?

The food and health literature has indicated a growing degree of confusion and scepticism about the claims of health benefits in foods (Annunziata & Vecchio, 2011; Hasler, 2008; Tan & Tan, 2007). The weight loss marketplace itself has been shown to be one in which there is anecdotal evidence of mistrust of advertising and unregulated claims are commonplace (Prendergast et al., 2009). Furthermore, a degree of scepticism and doubt was also evident in the responses gathered in the pilot study. It was therefore important to separately capture the degree to which participants considered whether they saw the concept as sounding too good to be true, and compare these ratings with the believability responses.

RQ.1.3: To what extent do the responses indicate hopefulness or firm belief that the concept will work for them?

In line with appraisal theory, making believability judgements, because they involve an uncertain, but personally significant appraisal about a future outcome, may implicitly reflect hope and hopefulness about the product concept. Although, MacInnis & de Mello (2005) view hope as an emotion and expectations as cognitive beliefs, the role of hope and the interrelationship between these two concepts has not been empirically explored. It was therefore of interest to understand the interplay between the two responses, particularly for
those who had indicated strong believability ratings. A summary question was included which included both believability and hopefulness response options, and in this way the definitiveness of the believability assessment was explored.

**RQ.1.4: What is the relationship between the ‘believability for self’ responses and women’s’ beliefs and ideas about weight loss?**

A person’s pre-existing beliefs and values are theorised to be highly influential in their decision making across the social cognitive (Ajzen, 1991; Bandura, 1997), and innovation/adoption literature concerning new product assessments (Hoeffler, 2003). The degree to which the concept was seen to be compatible with personal beliefs and ideas about weight loss activities reflects aspects of one’s identity construction, and was therefore expected to be positively linked to the believability judgements. Whilst, the relationship between credibility and prior beliefs has been demonstrated in a website context (Wathen & Burkell, 2001), research into this association is sparse for believability and remains unaccounted for in the present context.

**RQ.1.5: What is the relationship between ‘believability for self’ and intention to try responses?**

The intention to behave in a certain way towards an outcome also has a long history in social cognitive theories (Ajzen, 1991; Fishbein & Ajzen 1975). Intention to try or buy is widely used as a concept testing measure to predict future behaviour (Moskowitz et al., 2008). However, within the health claim, and weight loss literature, few studies have investigated the linkages between believability and outcome variables such as intention to try or buy. As noted, there are recognised inconsistencies between intentions and behavioural outcomes, particularly in weight loss behaviour studies, and it was important to quantitatively establish the extent of the association with the believability responses.

**RQ.1.6: What are the relationships between ‘believability for self’ responses and individual differences pertaining to a) general, and b) weight loss characteristics?**

The study of individual differences has a rich history in the consumer food literature, and the importance of understanding differentiating factors associated with personally significant appraisals has been noted (Johnson & Stewart, 2005). Relevant individual differences were selected *a priori* from past consumer behaviour and psychology literature including differences incorporated in health behaviour, and those specific to attempting weight loss
(Abraham et al., 1998; Puttermann & Linden, 2004). Whilst not intended to represent a complete framework of possible antecedents, those selected were seen as appropriate for exploring the consumer believability judgement process. The rationale for including the various individual differences are discussed below in two areas, general and weight related differences.

a) General Individual Differences

- **Demographics**: Socio-demographics including age, education, family size, ethnicity and income were included for exploratory purposes. Although these are acknowledged to be broad-based indicators, previous literature has shown variances in the responses on these classifications in studies of consumer scepticism, although conflicting results occur (Obermiller et al., 2005; Pervan & Martin, 2012).

- **Personality**: Personality is a stable and integral set of characteristics and tendencies that result in individual differences and patterns of behaviour. These are observed to affect cognition, affect and desires over time (American Psychological Association, 2015; Maddi, 1989). Personality factors have been included as factors of influence in food choice models (Fotopoulos, Krystallis, Vassallo, & Pagiaslis, 2009), and functional food consumption, where they are shown to be dependent on the consumption situation (Van Kleef et al., 2005a). Two specific subjective assessments of one's perceived optimism, and pre-disposition to believe information were also included. Those who are inherently more optimistic and agreeable may generate fewer barriers and show greater initial believability, because of their inherent hopefulness and lack of scepticism.

- **Functional Foods Attitudes**: Consumer attitudes to the general concept of the delivery of health benefits from functional foods have produced mixed findings, and generalisations are difficult due to the context and regional variations (Urala & Lahteenmaki, 2007, 2004; Verbeke, 2005). Nonetheless, there are indications that, underlying consumer attitudes towards the idea of the foods in general may underlie the willingness to try specific products (Urala & Lahteenmaki, 2007). It was therefore important to explore this relationship in the present context. Believability scores were expected to be higher if attitudes to functional foods in general were viewed as more positive.

- **Food Neophobia**: Openness and adventurousness for consuming novel foods, such as those from different cuisines, is termed ‘food neophobia’ (Pliner & Hobden, 1992). Food neophobia has been studied for foods embodying technological advances such as
genetically modified food (Grunert, Bredahl, & Scholderer 2003; Lahteenmaki, Grunert, Ueland, Astrom, Arvola & Bech-Larsen, 2002), and the acceptance of functional foods for older consumers (Stratton, Vella, Sheeshka, & Duncan, 2015). Those with higher food neophobia were found to be less likely to accept functional foods (Stratton et al., 2015), although this association is dependent on the food carrier (Siegrist, Stampfli, & Kastenholz, 2008), and other findings on the link between food neophobia and willingness to use functional foods have been mixed (Urala & Lahteenmaki, 2007). Hence, it is of interest to explore whether food neophobia has a negative relationship with believability responses within the present context.

b) Weight Loss Related Individual Differences

- **Amount of weight to lose:** The literature review gave insight into the difficulties associated with sustaining weight loss and the possible social stigmas felt by those who are overweight/obese. The severity of a health risk has been shown to be a factor in self-regulation behaviour (Abraham, et al., 1998; Rosenstock 1974). Those who see themselves with higher amounts of weight to lose may regard the concept differently to those with less weight to lose, due to their differing experiences and challenges. The amount of weight to be lost is posited to be related to the personal judgement of the believability of the concept, but the direction of the relationship needs further exploration.

- **Importance of Weight Loss:** In contrast to the amount of weight which one is attempting to lose, the importance of a weight loss goal captures a degree of desire about the outcome of the activity (Perugini & Bagozzi, 2001). For example, the pre-occupation with losing small amounts of weight for appearance related motivations has been discussed by Prendergast et al., (2009). It was important to establish if the degree to which a participant views her weight loss goal as important was related in some way to their believability response. This relationship is expected to be positive in line with previous indications of the motivated nature of believability responses, and theories on the influence of hope under high involvement conditions (MacInnis & de Mello, 2005).

- **Hopefulness in Reaching Goal:** The hopefulness in meeting goals was included to capture the expectation of being successful in current weight loss. In empirical research, de Mello, MacInnis & Stuart (2007) showed that reduced confidence in reaching a goal meant that a potentially enabling product was viewed as more credible. Participants with less confidence were not as discriminating over low credibility message arguments, and
this was attributed to motivated reasoning (Kunda, 1990). Therefore, participants who are less hopeful of reaching their weight loss are expected to respond with a more favourable believability rating towards the concept.

- **Difficulties with past weight loss:** The presence, or absence, of previous difficulties is seen as a factor of interest for further exploration. This again may indicate the presence of motivated reasoning about the concept (Kunda, 1990), where those who have experienced difficulties in certain pre-specified areas may respond with more positive believability responses.

- **Perceived Behavioural Control:** The degree to which one feels in control over circumstances and able to overcome difficulties is an important construct in the psychological literature (Rotter, 1966). Whether an individual considers they have control has been empirically shown to be an influential predictor of a behavioural outcome across a wide range of contexts (Ajzen, 2002). It is useful to understand whether participants, who perceive they have less control regarding their weight loss, will view the foods concept benefit as more believable. They may expect a greater degree of control to eventuate from their perception of the product agency benefits to be received (Otnes et al., 2014).

- **Self-Efficacy:** The perception of one’s own capability to perform a task within a specific domain is an important construct in Social Cognitive Theory (Bandura, 1997). It has been shown to be a predictor of successful weight loss behaviours (e.g., Conner & Norman, 1994; Teixeira et al., 2005). The assessment of one’s own abilities was therefore explored as a possible factor in whether the foods concept was thought to be believable. Again, it is unknown whether or not participants, who perceive themselves to be less capable in their weight loss attempts, will view the foods concept as more believable, and expect gains in their own abilities arising from the hunger control benefits to be received.

- **Knowledge of Dieting Methods:** In other contexts, perceived knowledge has been identified as a key appraisal dimension (Johnson & Stewart, 2005), an antecedent of credibility evaluations (Brucks, 1985; Rieh and Danielson, 2007; Wathen & Burkell, 2001), and an integral aspect of new product responses (Moreau, Lehmann & Markman, 2001). Participants who subjectively perceived themselves as more informed about dieting methods were expected to be more likely to appraise the concept as believable due to their understanding of its satiety impact.
5.2 Study 1 - Method

Ethics approval was obtained for the study from the University of Auckland Human Participants Ethics Committee (UAHPEC) on 20\textsuperscript{th} April 2012 (see Appendix A: Letters of Ethics Approval).

5.2.1 Pilot Study

Prior to the commencement of the fieldwork for Study 1, a pilot test was conducted to check the performance of the intended questions and the flow of the questionnaire. Specifically, it was important to ensure that participants understood the concept statements that were included, and that the believability responses enabled a sufficient range of responses to emerge. A total of 42 self-completion questionnaires were completed by a convenience sample of women from Plant and Food Research staff, University of Auckland colleagues, and personal contacts (see Appendix B: Study 1- Pilot Details). Where possible, participants were debriefed after the completion of the questionnaire and asked to explain their understanding of the concept and meaning of each question. Revisions were made based on the feedback to clarify the concept wording and to simplify the scale anchors.

5.2.2 Data Collection

The study used an internet administered questionnaire (see Appendix C: Study 1 Questionnaire). Internet surveys are now recognised as an efficient and cost effective method of data collection and their usage has increased amongst academic consumer researchers (Fulgoni, 2014; Rapp & Hill, 2015). Whilst they offer benefits for data collection such as speed, flexibility and sample control, there are known limitations in terms of the sample representativeness and the impersonal, consequence free nature of the responses, which are discussed more fully in section 5.5. The fieldwork was undertaken in June 2012 using the services of ResearchNow, an accredited member of the Market Research Society of New Zealand. All participants signalled their consent to partake in the survey prior to its commencement. The study was funded by The New Zealand Institute for Plant and Food Research.
5.2.3 The Sample
A quota sample was obtained from Australian members of the ResearchNow on-line panel living in metropolitan areas. It included 601 female participants (aged between 35 and 65 years) who met the screening criteria of claiming to be currently attempting to lose weight. Interlocking quotas were set for age, education and the subjective amount of weight loss being attempted, to ensure sufficient base sizes were obtained for data analysis. The setting of criterion for age, and education was based on previous indications of differing levels of scepticism by age group and education (Obermiller & Spangdenburg, 1998). It was also important to capture a range of participants with different perceptions of how much weight they were attempting to lose, because of the potentially different dynamics of the challenge. The age range was specified for women over 35 years, who are indicated to be more likely to be interested in weight control and the purchase of weight control products (Business Insights, 2011). As the survey was conducted on-line, participants 65 years of age and older were not included due to the lower incidence of computer facilities in their households. By focussing the survey on women, the opinions of sub-groups could be studied with larger sample sizes than if the total sample included men.

5.2.4 Description of Participants
The characteristics of the sample are outlined below in Table 3. It shows the number and percentage of participants in each grouping. Education quotas were skewed towards those who had completed high school or college, due to the availability of on-line panellists.
Table 3: Background Characteristics of the Sample (n=601)

<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><em><em>Age</em> (years):</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>200</td>
<td>33.3</td>
</tr>
<tr>
<td>45-54</td>
<td>201</td>
<td>33.4</td>
</tr>
<tr>
<td>55-64</td>
<td>200</td>
<td>33.3</td>
</tr>
<tr>
<td><em><em>Education</em>:</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some high school or less</td>
<td>93</td>
<td>15.5</td>
</tr>
<tr>
<td>Completed high school</td>
<td>208</td>
<td>34.6</td>
</tr>
<tr>
<td>Some University or College</td>
<td>118</td>
<td>19.6</td>
</tr>
<tr>
<td>Graduated University or College</td>
<td>182</td>
<td>30.3</td>
</tr>
<tr>
<td><strong>Amount of weight attempting to lose:</strong>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>209</td>
<td>34.8</td>
</tr>
<tr>
<td>Moderate</td>
<td>223</td>
<td>37.1</td>
</tr>
<tr>
<td>Large</td>
<td>169</td>
<td>28.1</td>
</tr>
<tr>
<td><strong>Australian Metropolitan Area:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sydney</td>
<td>192</td>
<td>31.9</td>
</tr>
<tr>
<td>Melbourne</td>
<td>234</td>
<td>38.9</td>
</tr>
<tr>
<td>Brisbane</td>
<td>91</td>
<td>15.1</td>
</tr>
<tr>
<td>Adelaide</td>
<td>84</td>
<td>14.0</td>
</tr>
<tr>
<td><strong>Marital Status:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>61</td>
<td>10.1</td>
</tr>
<tr>
<td>Married</td>
<td>386</td>
<td>64.2</td>
</tr>
<tr>
<td>Divorced</td>
<td>53</td>
<td>8.8</td>
</tr>
<tr>
<td>Widowed</td>
<td>8</td>
<td>1.3</td>
</tr>
<tr>
<td>Separated</td>
<td>21</td>
<td>3.5</td>
</tr>
<tr>
<td>Living with partner/significant other/</td>
<td>65</td>
<td>10.8</td>
</tr>
<tr>
<td>Missing Data</td>
<td>7</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Income Gross Household Income:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$30,000 to less than $60,000 AUD</td>
<td>163</td>
<td>27.1</td>
</tr>
<tr>
<td>$60,000 to less than $100,000 AUD</td>
<td>164</td>
<td>27.3</td>
</tr>
<tr>
<td>$100,000 to less than $150,000 AUD</td>
<td>127</td>
<td>21.1</td>
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<tr>
<td>$150,000 to less than $200,000 AUD</td>
<td>30</td>
<td>5.0</td>
</tr>
<tr>
<td>$200,000 AUD or more</td>
<td>9</td>
<td>1.5</td>
</tr>
<tr>
<td>Prefer not to answer/ Missing</td>
<td>108</td>
<td>17.9</td>
</tr>
<tr>
<td><strong>No. in Household (including participant):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>62</td>
<td>10.3</td>
</tr>
<tr>
<td>2</td>
<td>212</td>
<td>35.3</td>
</tr>
<tr>
<td>3</td>
<td>116</td>
<td>19.3</td>
</tr>
<tr>
<td>4</td>
<td>126</td>
<td>21.0</td>
</tr>
<tr>
<td>5 or more</td>
<td>81</td>
<td>13.5</td>
</tr>
<tr>
<td><strong>Ancestry:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aboriginal</td>
<td>5</td>
<td>.8</td>
</tr>
<tr>
<td>Australian</td>
<td>388</td>
<td>64.6</td>
</tr>
<tr>
<td>Other Oceanian</td>
<td>17</td>
<td>2.8</td>
</tr>
<tr>
<td>North West European</td>
<td>103</td>
<td>17.1</td>
</tr>
<tr>
<td>South East European</td>
<td>60</td>
<td>10.0</td>
</tr>
<tr>
<td>North African and Middle Eastern</td>
<td>5</td>
<td>.8</td>
</tr>
<tr>
<td>South East Asian</td>
<td>11</td>
<td>1.8</td>
</tr>
<tr>
<td>North East Asian (e.g. Chinese)</td>
<td>19</td>
<td>3.2</td>
</tr>
<tr>
<td>Southern and Central Asian (e.g. Indian)</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>North American</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>South American</td>
<td>3</td>
<td>.5</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
<td>2.8</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>8</td>
<td>1.3</td>
</tr>
</tbody>
</table>

*Quotas Imposed
Current and Ideal Weight: Data was collected on participants’ current weight and their ideal goal weight in kilograms or lbs. From this, the average kilograms to lose was calculated. The means and standard deviations for the 542 participants who completed this section are summarised in Table 4.

Table 4: Weight Loss Characteristics of Sample

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean (kg)</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current weight (kg)</td>
<td>80.8</td>
<td>19.0</td>
</tr>
<tr>
<td>Ideal weight (kg)</td>
<td>64.6</td>
<td>11.9</td>
</tr>
<tr>
<td>Kgs to lose (kg)</td>
<td>16.1</td>
<td>14.7</td>
</tr>
</tbody>
</table>

The weight to be lost was also recorded as a subjective amount of weight (a small, moderate, or large amount). The two measures of weight loss were significantly correlated ($r = 0.672$, $p < .01$). In the following analysis the subjective categorisation has been used to reflect the participant’s belief about how much they felt they were currently attempting to lose, rather than their numeric data. 87% of participants indicated that they had experienced previous difficulty with weight loss.

5.2.5 The Questionnaire

The on-line questionnaire comprised of several sections. For the sake of parsimony, and as shown in Table 5, only those sections of the questionnaire deemed to be most useful to answering the overall research questions are included in the following operational details and findings for the study. The two excluded sections, whilst highlighting additional interesting observations about the motivated nature of the responses, were excluded as superfluous to the present findings for the thesis. The finalised questionnaire was checked and approved by University of Auckland Department of Marketing colleagues, prior to the commencement of the fieldwork, and was pre-tested by the data provider, ResearchNow, to ensure it took less than a maximum of 20 minutes to complete. (For the full questionnaire, please see Appendix C: Study 1 Questionnaire).
Table 5: Questionnaire Sections

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1</td>
<td>Screening and quota establishment</td>
</tr>
<tr>
<td>Section 2</td>
<td>Concept presentation and response ratings</td>
</tr>
<tr>
<td>Section 3</td>
<td>Subjective emotional responses*</td>
</tr>
<tr>
<td>Section 4</td>
<td>Evaluation of additional information on believability judgements*</td>
</tr>
<tr>
<td>Section 5</td>
<td>Healthy Eating -Concept rating</td>
</tr>
<tr>
<td>Section 6</td>
<td>Individual Differences – including general and weight related attitudes and characteristics</td>
</tr>
</tbody>
</table>

* Not included in further analysis

5.2.6 Operationalisation of the Variables

Details of the operationalisation of the questionnaire items used in the analysis are outlined below. Table 6 shows the questionnaire wording for the five response variables for reader convenience.

**Overall Believability (OB):** An overall evaluation of the credibility/trustworthiness/believability of the product positioning statement, on three items adapted from established scales (Beltramini, 1982; Gurhan-Canli & Maheswaran, 2000).

**Believability for Self (Bfs):** Six items developed from the literature relating to appraisals, expectations, goals, and personal relevance. The questionnaire included a seventh item, “it fits with my ideas about weight loss” which was subsequently removed and combined for analysis with the belief compatibility item. One adaptation for the study was the departure from the conventional Likert anchors (Agree-Disagree) to the use of ‘strongly disbelieve-strongly believe’ anchor wording.

**Sounds Too Good to be True (STG):** A 7 point rating proxy measure to capture perceived scepticism and doubt using a commonly employed idiom which conveys the degree to which an item is seen to be over estimating its abilities.

**Belief Congruency (BC):** A composite of two items (7 point) rating the compatibility of the product concept with the participants own personal beliefs, and weight loss ideas.

**Intention to Try (ITT):** A standard 5 point scale was used to indicate the participants overall intention to try. Several scales are available which seek to estimate market outcomes such as purchase intent (Morwitz et al., 2007). In the food literature, intention to try is used as an alternative construct which indicates a degree of interest without narrowing down the
intention to a purchase situation, given the large number of marketplace variables such as price.

**Overall Summary Response:** An exploratory summary question which gave the option for participants to provide an indication of whether they were definite about their believability judgement or hopeful:

- I definitely believe it will work for me
- I’m hopeful that it will work for me
- I’d like to believe it will work for me but I’m not sure
- I’m not hopeful that it will work for me
- I definitely don’t believe it will work for me

Although several scales of measuring hope as an individual trait are available (e.g., Herth, 1992; Miller & Powers, 1988; Snyder, Sympson, Ybasco, Borders, Babyak, & Higgins, 1996) these focus on hopefulness as an internal trait, rather than whether or not an appraisal of an item evokes hope.
### Table 6: Operationalisation of the Response Constructs

<table>
<thead>
<tr>
<th>Constructs of Interest</th>
<th>Scale anchors</th>
<th>Questionnaire Wording</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Believability (OB)</td>
<td>7 point scales Not at all credible&lt;br&gt;Not at all believable&lt;br&gt;Not at all trustworthy</td>
<td>How credible is a food or drink product with this benefit?&lt;br&gt;How believable is a food or drink product with this benefit?&lt;br&gt;How trustworthy is a food or drink product with this benefit?</td>
</tr>
<tr>
<td>Believability for Self (Bfs)</td>
<td>7 point scale Don’t Believe at all&lt;br&gt;Believe very strongly</td>
<td>From what you have read, please indicate on the scale below the position that best reflects how much you believe the following statements. A food or drink product with this benefit will: a) work for me b) help me to lose weight c) have many advantages for me d) help me to overcome some of the barriers that I face at the moment with weight loss e) I will feel in control if I try a food or drink product with this benefit f) I expect a good outcome if I try a food or drink product with this benefit</td>
</tr>
<tr>
<td>Intention to Try (ITT)</td>
<td>5 point Scale I will definitely try it- I definitely won’t try it</td>
<td>Which one of the following statements best describes your feelings about trying a food or drink with the new benefit?</td>
</tr>
<tr>
<td>Sounds too good to be true (STG)</td>
<td>7 point scale Don’t agree at all&lt;br&gt;Agree very strongly</td>
<td>A food or drink with this benefit sounds too good to be true</td>
</tr>
<tr>
<td>Belief Compatibility (BC)</td>
<td>7 point scale Don’t agree at all&lt;br&gt;Agree very strongly</td>
<td>A food or drink with this benefit fits my beliefs A food or drink product with this benefit fits in with my ideas about weight loss</td>
</tr>
</tbody>
</table>
5.2.6 Operationalisation of Variables (cont.)

**Personality:** A 10 item composite derived from the Big Five Inventory was used (Rammstedt & John, 2007). It included agreeableness (representing good nature), conscientiousness (representing reliability), extraversion (representing sociability), neuroticism (representing emotional instability), and openness to experience (representing curious nature). An added measure for the degree of optimism were adapted from Scheier and Carver’s (1985) optimism scale, as well as a pre-disposition to believe item.

**Attitudes to Functional Foods:** Participants were asked to read a statement about functional foods which was developed by the researcher from functional food definitions available in the literature (see Figure 5).

*Figure 5: Functional Food Description Presented to Research Participants*

<table>
<thead>
<tr>
<th>FUNCTIONAL FOODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>For many people the link between what we eat and our health is becoming more and more important. All foods contain basic nutrients that provide us with energy, but there is now a lot more interest in learning about the role of special components found in fruits, vegetables and cereal grains. These can improve our health and wellness and may even help reduce the risk of disease.</td>
</tr>
<tr>
<td>Over the past few years new health and wellness food products which make use of these compounds have been introduced into our food and grocery stores. They are called functional foods.</td>
</tr>
<tr>
<td>“Functional Foods” provide extra health and wellness benefits in addition to their nutritional value. To be called a functional food, the food must be fortified with additional compounds and have an added ‘function’ that it provides for the body. (Please note: items such as low-fat, low-salt, low-calorie foods, capsules and vitamin tablets are NOT regarded as functional foods)</td>
</tr>
<tr>
<td>Examples of functional foods are:</td>
</tr>
<tr>
<td>Margarine spreads with plant sterols to lower cholesterol</td>
</tr>
<tr>
<td>Yoghurt with probiotics for digestive health</td>
</tr>
<tr>
<td>Orange Juice with calcium for bone health</td>
</tr>
<tr>
<td>Bread fortified with folic acid for female reproductive health</td>
</tr>
<tr>
<td>Functional foods promote better health and help reduce the risk of disease by helping the body in specific areas</td>
</tr>
</tbody>
</table>

The following 9 items were included from the consumer attitudes to functional foods scale (Urala & Lahteenmaki, 2007) and were measured using a 7 point Likert scale (Disagree strongly - Agree strongly). Asterisked items (*) were reverse scored for the composite rating:
I know a lot about functional foods
I can prevent disease by eating functional foods regularly
I am prepared to compromise on the taste of a food if the product is functional
*Functional foods are completely unnecessary
*For a healthy person functional foods are worthless
I believe that functional foods fulfil their promises
Functional foods promote my well-being
Using functional foods is completely safe
*Exaggerated information is given about the health effects of functional foods

**The Food Neophobia Scale:** Seven items were adapted from the scale developed to measure differences in people’s willingness to try new foods (Pliner & Hobden, 1992). The scale measures attitudes to new food experiences and tastes, and has been used previously to predict people’s willingness to try unfamiliar foods (Backstrom, Pirttila-Backman, & Tuorila, 2004; Tuorila, Lahteenmaki, Pohjalainen, & Lotti, 2001).

**Perceived self-control and self-efficacy:** Two measures derived from the Dieting Beliefs Scale (Stotland & Zuroff, 1990) were included. These originated from the Weight Locus of Control (WLOC), developed in the weight management domain to capture specific control expectations about weight loss (Saltzer, 1982). They have been treated as individual items, due to their low reliability when combined as a composite.

**Difficulties in achieving weight loss:** Participants were asked to indicate whether or not they had experienced previous difficulties with weight loss. Those who indicated previous difficulties then selected from a list of possible factors which they felt had prevented them from achieving their weight related goals in the past, including hunger and emotional eating.

**Perceived Knowledge of Weight Loss Methods:** A three item composite which reflected whether participants perceived themselves to be relatively more informed about dieting methods than others was added.

**Subjective weight loss:** Participants assessed the amount of weight (small, medium or large) they were attempting to lose at the time of the survey. Please note, this does not reflect the stage of the weight loss journey they were at. In some cases participants may have already lost weight and thus only perceive they have a relatively small amount to lose.

**The control healthy eating statement:** A description was developed by the researcher from the range of public health recommendations available in New Zealand. The statement wording (Figure 6) was verified by an independent business health expert and a registered nutritionist.
Losing weight and keeping it off is all about following a healthy lifestyle. There are many diets on offer, but these are often hard to keep to and, in some cases, they are just plain unhealthy.

The best way to lose weight is to focus on a healthy food plan that you can commit to over a long period. This means eating plenty of vegetables, whole grains, low-fat milk and lean meats. These give your body the right nutrients and help you to resist overeating. Eating mainly these types of foods or beverages everyday provides you with a balanced diet containing protein and fibre to keep you feeling full and healthy.

The occasional treat is alright, but it is best to reduce foods which contain added sugar and fats. Some daily exercise is also a good idea to enhance the feeling of wellbeing and to keep your body working well. It is recommended that a minimum of thirty minutes of physical activity be included each day for an adult (for example, walking or cycling).

Overall, these sensible, healthy eating guidelines combined with an active lifestyle offer the best way to succeed with your weight control targets. These are the current recommendations of nutrition and health experts.

5.2.7 Data Analysis

The survey data was analysed using IBM SPSS 20 and IBM SPSS 23 statistics software. A preliminary screening of the data assessed for normality, skewness, kurtosis and homoscedasticity (Hair, Black, Babin & Anderson, 2010). Although the assumptions of normality were not met by the intention to try measure, under the overall approach of the research, where quantitative data was used for exploratory indications of relationships, it was viewed as satisfactory to use parametric testing procedures. Composite response measures were produced for key measures from the questionnaire items. The reliabilities (Cronbach’s coefficient alpha) for each of these are reported in Table 7. These were considered satisfactory for a descriptive explorative study (Peterson, 1994).

<table>
<thead>
<tr>
<th>Measure</th>
<th>No. of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Believability</td>
<td>3</td>
<td>0.934</td>
</tr>
<tr>
<td>Believability for self</td>
<td>6</td>
<td>0.954</td>
</tr>
<tr>
<td>Belief Congruency</td>
<td>2</td>
<td>0.852</td>
</tr>
<tr>
<td>Functional Foods Attitude</td>
<td>9</td>
<td>0.826</td>
</tr>
<tr>
<td>Perceived Knowledge of Weight Loss Methods</td>
<td>3</td>
<td>0.788</td>
</tr>
<tr>
<td>Food Neophobia</td>
<td>7</td>
<td>0.762</td>
</tr>
</tbody>
</table>
The following statistical tests were performed according to procedures for SPSS (Brace, Kemp & Snelgar, 2012):

1. To show the significance of differences between mean ratings, a parametric test (paired t test) was used in RQ 1.1.
2. Correlations using Pearson’s rank correlation coefficient were conducted for RQ.1.4, RQ.1.5 and RQ.1.6.

A correlation matrix of the bivariate correlations of the independent variables was conducted (see Appendix D: Bivariate Correlation Matrix of Independent Variables).

5.3 Study 1- Findings

RQ.1.1: To what extent do women, seeking weight loss, rate the concept of foods with a hunger control benefit as believable?

On average, the women rated the foods with the hunger control benefit at the midpoints for both measures of ‘overall believability’ and ‘believability for self’, indicating an uncertain or ambivalent response with a high central tendency. A summary of the means and standard deviations for the two responses are shown in Table 8.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Scale</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Believability (OB)</td>
<td>7 point</td>
<td>4.20</td>
<td>1.23</td>
</tr>
<tr>
<td>Believability for Self (Bfs)</td>
<td>7 point</td>
<td>4.82</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Somewhat unexpectedly and in contrast to the pilot study findings, ‘believability for self’ ratings were significantly higher than ‘overall believability’ ratings, indicating the different consumer interpretation made between the responses. The paired samples t-test which compared the means showed a statistically significant difference ($t = 13.60, df = 600, p < .0005, two-tailed$). As expected, the ratings were related ($r = 0.61, p < .01$). In contrast, the healthy eating control statement which was included for comparison purposes received a considerably more positive response. It was rated as highly credible/ believable/ trustworthy ($M = 5.95, SD = 1.01, 7$ point scale). The ‘overall believability’ ratings for the two concept statements were significantly different (paired samples t test, $t(600) = 28.64, p < .005$),
indicating greater confidence in the public health advice, rather than the unknown expectations of a marketed food concept.

RQ.1.2: To what extent do they rate the concept as ‘too good to be true’?

On average participants agreed with the statement ‘it sounds ‘too good to be true’ ($M = 5.25$, $SD = 1.40$, 7 point scale), with 74% of participants agreeing with the statement to some extent. However, surprisingly, no relationship was evident between the ‘believability for self’ responses and the ‘sounds too good to be true’ responses. More surprisingly, over 82% of strong believers indicated they were sceptical or dubious to some degree. This was counter to the expected negative relationship, and formed an important area for further qualitative exploration. Additionally, there was no relationship between the ‘intention to try’ response and the ‘sounds too good to be true’ ratings. In the present context, the ‘sounds too good to be true’ possibly reflects a more generalised and overarching scepticism, rather than a product specific estimation, heightened by the present weight loss marketplace context, which is further discussed in detail in Chapter 8, section 8.2.

RQ.1.3: To what extent do the responses indicate hopefulness or firm belief that the concept will work for them?

An overall assessment question was included to explore how participants would decide between responses for believability and hopefulness. Figure 7 shows this overall summary response. Most participants (64%) responded that they were hopeful that the product concept would work for them. When given the option, 75% of those who had previously indicated they ‘Believe very strongly it will work for me” shifted their rating to “I’m hopeful that it will work for me”. This is interpreted as indicating the integral role of hoping within the believability response for these participants. This suggests the initial motivated nature of the judgement regarding hopes for the achievement of a personal goal (de Mello et al., 2007), which may lead to biases in cognitive processes from motivated reasoning (Kunda, 1990).
Figure 7: Overall Summary Response for the Food Concept

RQ.1.4: What is the relationship between the ‘believability for self’ responses and women’s beliefs and ideas about weight loss?
On average the foods concept was found to be somewhat compatible with the women personal beliefs ($M = 4.6, SD = 1.44$ 7 point scale), and ideas about weight loss ($M = 4.72, SD=1.53$, 7 point scale). As expected, the extent to which participants rated the concept as congruent with their beliefs was closely associated with their ‘believability for self’ responses ($r = 0.87 p<.01$), indicating the need for a basic concordance with ones values and beliefs in the formation of a more positive believability judgement. The detailed reasons behind this compatibility or lack of compatibility are further explored in the subsequent qualitative studies.

RQ.1.5: What is the relationship between the ‘believability for self’ and intention to try responses?
The intention to try responses indicated a positive response to the idea of the proposed foods in terms of trial intentions. A high level of intention to try was revealed ($M = 4.22, SD = 0.88$, 5 point scale). A positive intention was indicated by 82% of participants, with 45% selecting the top box, “I will definitely try it”. The relationship between ‘believability for self’ and intentions was revealed to be moderate with ‘believability for self’ and intention having a higher relationship ($r =0.644, p<.01$) than ‘overall believability’ and intention ($r = 0.414, p<.01$). Significance tests were not performed due to the normality and skewness violation of the intention to try distribution. Figure 8 visually illustrates the contrast in the frequency
distributions (%) of the ‘believability for self’ responses and intention responses obtained in the survey.

Figure 8: Frequency Distributions for a) Believability for Self and b) Intention

RQ.1.6: What are the relationships between ‘believability for self’ responses and individual differences pertaining to a) general and b) weight loss characteristics?

Individual differences that were significantly associated with the believability responses from the Pearson correlation analysis are revealed below in Table 9. Overall, the associations were generally low. This is possibly attributable to the central tendency of the ‘believability for self’ ratings where the impact of the relationships for those at the poles was obscured by the
large numbers of participants at the centre points. The relationships with intention to try ratings are also included for comparative purposes.

**Table 9: Correlations between Concept Responses and Individual Factors**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Overall Believability</th>
<th>Believability for Self</th>
<th>Intention to try</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td></td>
<td>-0.12</td>
<td></td>
</tr>
<tr>
<td>See myself as trusting</td>
<td>0.12</td>
<td>0.15</td>
<td>0.11</td>
</tr>
<tr>
<td>See myself as lazy</td>
<td></td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td>Believe most things I read</td>
<td>0.24</td>
<td>0.29</td>
<td>0.19</td>
</tr>
<tr>
<td>Attitude to Functional Foods</td>
<td>0.34</td>
<td>0.32</td>
<td>0.34</td>
</tr>
<tr>
<td>Weight goal importance</td>
<td></td>
<td>0.22</td>
<td>0.26</td>
</tr>
<tr>
<td>Subjective weight loss amount</td>
<td></td>
<td></td>
<td>0.14</td>
</tr>
<tr>
<td>Experienced prior difficulty losing weight</td>
<td></td>
<td>0.15</td>
<td>0.19</td>
</tr>
<tr>
<td>Perceived self-efficacy</td>
<td></td>
<td>-0.12</td>
<td></td>
</tr>
<tr>
<td>Perceived control over weight loss</td>
<td></td>
<td>-0.26</td>
<td>-0.21</td>
</tr>
<tr>
<td>Knowledge of diet methods</td>
<td>0.14</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>Hopefulness of losing weight</td>
<td>0.14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All significant Pearson Correlations $p<.01$ (two tailed)

**a) General Individual Differences**

Demographic and socioeconomic factors did not result in variations in the levels of the response measures with the exception of education. The education level was negatively related, at a low level, to ‘believability for self’ in line with results for scepticism of advertising obtained by Obermiller & Spangdenberg (1998). Differences such as family size, income and marital status in the present weight loss context were too broad to capture the nuances in the measures which are likely to be mediated by other personal differences. Similarly, personality factors when analysed by the Big 5 dimensions did not show relationships to ‘believability for self’. However, certain individual items which allow insight into participant’s self-perceptions were significant when analysed individually, “See myself as someone who is optimistic” and “believe most things I read” were positively and significantly correlated, albeit at low levels, with ‘believability for self’. This is interpreted as indicating the predisposition of some participants to be open, optimistic and trusting, which was influential in eliciting higher personal ‘believability for self’ assessments.

Attitude to functional foods was a significantly correlated factor with ‘overall believability’ $(r = 0.34, p<.01)$, and ‘believability for self’ ratings $(r = 0.32, p<.01)$. In contrast, and unexpectedly, food neophilia (from the 7 item food neophilia scale) was not a significant
factor across any of the measures surveyed. This is in contrast to previous functional food literature where food neophobia has been shown to be related to attitudes to the foods, although this relationship has been shown to be dependent on the food carrier (Siegrist et al., 2008).

b) Relationships with Weight related factors

i) Weight Goal Importance
The achievement of one’s weight loss goal was generally scored as important for those sampled, with 82% of participants indicating they agreed to some extent ($M = 5.54$, $SD = 1.153$, 7 point scale). In terms of the associations with ‘believability for self’, participants who indicated that their weight loss goal was important to them were significantly more likely to give higher ‘believability for self’ ratings ($r = 0.22$, $p < .01$). Although the correlation is relatively low, the positive association is demonstrated graphically in Figure 9, to highlight the differences of the ‘believability for self’ ratings for those at the poles. Those who indicated lower weight goal importance provided lower ‘believability for self’ mean scores ($M = 3.25$) than those with higher weight goal importance ($M = 5.14$). It is important to note, however, the very low base sizes for those having lower weight goal importance. Overall, the results are consistent with previous indications of the motivated nature of believability responses previously observed, and theoretical conceptualisations of the influence of hope under high involvement conditions (MacInnis & de Mello, 2005).

Figure 9: Weight Goal Importance and Believability for Self

![Graph showing the relationship between weight goal importance and believability for self.](image-url)
ii) Prior Difficulties in Losing Weight
As expected, having encountered prior difficulties in attempting weight loss emerged as an influential factor on ‘believability for self’ judgements, although the relationships were relatively weak. Those consumers who indicated that they had experienced difficulty had higher levels of intention to try, saw it fitting their beliefs, but were more sceptical. This perhaps indicates previous difficulties affected their level of optimism for a new option.

iii) Control over Weight Loss
The degree to which participants felt their dieting efforts had an impact on their weight loss was significantly and negatively correlated with ‘believability for self’ responses ($r = -0.25$, $p<.01$). That is, the less a participant felt in control of their weight loss, the more they believed the product concept would work for them. Although the correlations with self-efficacy were low, they also reflected this negative relationship. The complexity of understanding one’s own perceptions of control over hunger and how this might be enhanced from a proposed functional food requires more qualitative exploration to understand the perception of the product agency benefits to be received (Otnes et al., 2014).

Somewhat unexpectedly, several other variables revealed very low or negligible relationships with ‘believability for self’ responses. Notably, the amount of weight consumers were currently attempting to lose (subjectively assessed as a ‘large’, ‘moderate’ or ‘small amount’) was not a significant factor associated with the ‘believability for self’ ratings. However, some differences can be observed from examining the responses for these groups on the other rating measures. For those with a ‘large’ amount of weight to lose, more doubtfulness was exhibited, with 28.4% of these participants strongly agreeing that the product concept sounded too good to be true, as compared to 17.4% of those with a ‘small’ amount to lose. Further to this, the group with a ‘large’ amount to lose, also had greater levels of intention to try, with 50% indicating they definitely would try them, versus 37% of those with a small amount of weight to lose. This indicates the different approach to the overall judgement of the concept, and suggests the possible recognition of the greater difficulties ahead for those with larger amounts to lose. Although they are more doubtful, they indicate they are more willing to try the foods. The reasons behind this particular experience are further explored in Study 2. Also unexpectedly, relationships of significance were not found between the ‘believability for self’ responses and food neophobia, that is, attitudes to novel foods. This is perhaps due to the familiar food exemplars used as examples in the range of foods in the
conception description. For those who perceived themselves as relatively more informed about dieting methods, the relationship was also unexpectedly low, indicating that ‘believability for self’ was not linked to perceptions of higher knowledge.

Therefore, in answer to RQ 1.6, individual differences were apparent for the ‘believability for self’ responses to the proposed foods. The highest associations were found for women with a more positive attitude to functional foods, and also those motivated by a higher level of weight goal importance. However, the centralised nature of the ‘believability for self’ responses meant that the extent of the relationships was somewhat eclipsed, and the need for closer understanding of what underlies these significant relationships, and the possible presence of other influences is now required.

5.4 Study 1 – Initial Discussion of Findings

The online study provided expected and at times unexpected quantitative insight into the ‘believability for self’ response for the concept of the proposed foods. In general most women indicated an uncertain, tentative believability response, although there was evidence of polarisation in the ratings. This was not unexpected given the abstract nature of the concept statement itself. However, it was also apparent that there were possible issues with the participants’ interpretation of the believability questioning. For example, against expectations, participants indicated that they believed the proposed foods would work for them personally, more than they rated them as credible/ trustworthy or believable in general. This suggests fundamental differences in consumer sense making between these constructs, which have previously been combined in scales (e.g., Gurhan-Canli & Maheswaran, 2000). Further to this, the distinction that participants made between believing and hoping appeared blurred and there were indications throughout the findings that the overall response was one of hopefulness rather a definitive believability judgement. Somewhat unexpectedly, being an optimist and having hopefulness in reaching one’s weight goal were not factors in higher believability responses in Study 1. The ‘believability for self’ ratings therefore, appear to have drawn out a different, more hopeful, and motivated aspect of the response for some participants, and the reasons for this this warrant further deeper exploration.
The ‘sounds too good to be true response’ presented a general picture of dubiousness, even for those who had indicated high levels of believability and trial intentions, and in this way appeared disconnected from the other responses. The co-existing presence of scepticism and high believability is a future direction of interest in Study 2. There was also no relationship between scepticism for the concept and the intention to try. Previous literature has shown conflicting findings on the possible negative role of scepticism on the evaluation of in the consumption decision for health claims (Fenko et al., 2016; Mazis & Raymond, 1997; Szykman et al., 1997; Tan 2002; Tan & Tan, 2007), yet this has not been explored qualitatively. The present research looks to contribute to this interesting ‘anomaly’ in the in-depth interviews of Study 2.

The degree to which the concept was compatible with one’s beliefs and ideas about weight loss was confirmed to be moderate on average. The study however, gave indications that congruence with beliefs was strongly associated with believability responses. Further understanding of the particular reasons behind this compatibility / incompatibility, and how it may affect the judgements, is now required. Notably, the intention to try response for the proposed foods was strongly indicated by almost half of the participants. It appeared to be generalised across the sample and underlying subtleties and differences between consumers were obscured in the data analysis. It is important to note that, the ability of intentions to predict behaviour remains the subject of some debate (Bemmaor, 1995; Morwitz et al., 2007). Intentions have been shown to be a better indicator of behaviour for existing products rather than new, for shorter time horizons, and for specific brands rather than market categories.

Similarly, the results regarding individual differences, on the face of it appeared inconclusive, with relatively low associations recorded for the variables selected a priori to have potential relationships with the believability responses. Broader demographics were not shown to be discriminating. However, the study indicated the presence of more nuanced attitudinal and emotionally driven anticipatory factors, such as weight goal importance and the degree of control that one feels around weight loss efforts. Holding a positive attitude to the concept of functional foods is a difference which holds promise for further investigation into why it is associated with higher believability responses. Interestingly, those women having larger amounts of weight to lose, whilst not indicating higher believability judgements, were more likely to indicate trial, suggesting the lower level of hopefulness of those in this category, and the possible effects of stigmatisation on their responses (Granberg, 2011). This indicates the
potentially different nature of the challenge which is able to be explored in the ensuing qualitative studies. It is noted that, in past believability studies in a variety of different contexts, results also tend to show non-committal average believability responses. This is important in itself. Whilst it indicates on the face of it that many advertising and marketing claims are simply not found to be believable, it may also suggest the difficulties consumers face making pre-purchase judgements about believability. The different interpretation that consumers make about what believability means to them, possibly conflates this line of quantitative enquiry itself.

In terms of the approach to the data analysis, there were reasons for the basic descriptive and correlational analyses. The researcher initially conducted other statistical analysis such as a confirmatory factor analysis between the ‘overall believability’ and ‘believability for self’ composite ratings which showed the constructs to be conceptually distinct. Multiple regression, and mediating and moderation analyses were also undertaken. However, these are not reported due to concerns over the way in which believability was being interpreted by the participants and its possible conflation with hopefulness. The research approach became qualitatively dominant, with the focus on a constructivist understanding of the consumer sense-making of the concept to explore the reasons behind these indications and to understand how the women made sense of the functional foods concept.

In conclusion, Study 1 indicated that the benefit of easier hunger control from a range of foods engenders uncertain believability ratings for women seeking weight loss. However, despite this, relatively high levels of intention were also revealed indicating that women appear to be ‘hedging their bets’. Many are willing to try the product concept, but some will do so holding greater expectations and hopefulness than others. A more comprehensive and integrated discussion of the three studies takes place in Chapter 8.

5.5 Study 1 - Limitations

The limitations for Study 1 and the steps taken to address them were as follows:

1. A quota sample was utilised and participants were non-randomly selected to fit intersecting target quotas. Selection was limited to members of an internet panel, who fitted the criteria of currently attempting to lose weight. Additionally the sample
reflects the views of women in urban centres only, and does not cover the stance of women from smaller centres. Under the overall assumptions of the research the study was exploratory and the findings were not intended or required to be fully generalizable.

2. The data was collected using an on-line survey and the general limitations of this particular method must be acknowledged. Representativeness is limited to panellists who partake in incentivised on-line surveys (Evans & Mathur, 2005). Additional limitations centre on the degree of participant interest and the setting of the survey (i.e. noise and other distractions). Fulgoni (2014) also reports on the standards of practice of panel operators themselves and the need to manage panel overlap. ResearchNow, the provider of the service for this study has strict criteria for panel selection and undertakes panel quality maintenance aimed to minimise issues around panel integrity. These counter the above limitations to some extent.

3. Limitations relating to the participant’s interpretations of the concept and the questionnaire items must be noted, as they affect the reliability of the study. The understanding of the term ‘believable’ is likely to be subjective, and the ratings given reflect the personal and subjective nature of the interpretation. Checks were undertaken for inter item reliability which were found to be adequate for the believability measures, and to some extent the expected direction of the findings and correlations between the constructs does give some reassurance here.

4. Establishing validity is important for quantitative research in the positivist scale development tradition (Rossiter, 2002). Although, the exploratory approach of the present enquiry means that the findings are not claimed to be generalizable, validity checking procedures were undertaken. The discriminant validity of the ‘overall believability’ and ‘believability for self’ scales was established using confirmatory factor analysis, and face validity for the concepts was ascertained with senior departmental colleagues. The future scale development of a ‘believability for self’ construct, to capture aspects of consumer believability, would require further validity checking procedures.
5.6 Chapter Summary

Chapter 5 reported on Study 1, an online survey of responses to the concept of the proposed foods. The research questions for the study were outlined which were designed to obtain benchmark indications of the overall response and to explore possible individual differences. The study collected data from 601 urban, Australian women, aged between 35 and 64 years who were currently attempting weight loss. Overall, Study 1 indicated the potential personal sensitivities of the response and the many intricacies in trying to capture it. Several individual differences were revealed which warranted further exploration. The limitations of the study and a discussion of the results, including future directions for the qualitative phase of the study were also included in the chapter. With these exploratory findings in mind, the next chapter of the project turns to Study 2. It involves the sense making constructions of New Zealand women as they appraise the same foods product concept, in face to face in-depth interviews.
Chapter Six: STUDY 2

Following the quantitative indications of Study 1, numerous questions arose about the phenomenon of interest for the research, consumer believability judgments. Whilst there was a pronounced scepticism, why was this combined with indications of hopefulness, and a general interest in trying the proposed foods across diverse groups? What were the reasons for variance in the responses? These questions motivated the second study, involving face-to-face, in depth interviews with New Zealand women currently seeking weight loss. This chapter presents the aim, research questions, method, findings and discussion for Study 2, followed by a chapter summary.

6.1 Study 2 - Aim and Research Questions

The aim of Study 2 was to obtain in-depth insight into how women, given their particular weight loss perspectives, practices and challenges, made sense of and judged the believability of the concept. It aimed to understand what influenced these judgements and how they might be linked to intended behavioural actions such as purchase and trial. Three research questions were developed to guide the research process, and the rationale for them now follows.

Multiple influences are thought to govern individual food consumption over one’s life (Sobal et al, 2006), and the way in which weight loss is attempted take place within the daily and immediate processes of eating and culinary activities (Putterman & Linden 2004). A preliminary question was designed to identify themes within the women’s stories of their experiences, given their daily behaviours and weight loss activities.

RQ.2.1: How do women experience their eating and weight loss activities?

The second question enquired into the consumer sense making processes that arise in making judgements for the proposed foods. The concept of functional foods with a satiety benefit has not been previously researched using qualitative methods, and is considered potentially confusing (van Kleef et al., 2012), and theorised to lead to possible consumer overestimation (Booth & Nouwen, 2010). Further to this, Study 1 indicated issues of incompatibility and nuanced anticipatory factors, such as weight goal importance, and the degree of control in weight loss efforts, which required further exploration. Hence the second question:
RQ.2.2: How do women seeking weight loss judge whether the concept of the foods is believable for them?

The third question was more specifically posed to understand what was beneath the apparent inconsistency between the tentative or dubious believability responses, and the more positive intention to try the foods. The research sought to understand how this was resolved by the women, and asked:

RQ.2.3: How do the women’s believability judgements link with their future behavioural actions for the proposed foods?

6.2 Study 2 - Method

The qualitative method of in-depth face-to-face interviewing was seen as an appropriate research instrument within the constructivist approach. Individual interviews provide a unique opportunity to uncover rich and complex information. They allow access to the unique meaning making processes, and active construction of knowledge, by participants, rather than the imposition of a priori categories which might limit the response (Cavana, Delahaye & Sekaran, 2001; Lincoln, et al., 2011; Weiss 1995).

6.2.1 Data collection

In-depth interviews were conducted in New Zealand between June 2013 and August 2014 with a sample of 14 women who claimed they were currently attempting to lose weight. Ethics approval was obtained from the University of Auckland Human Ethics Committee (UAHEC) (see Appendix A: Letters of Ethics Approval). Prior to the data collection, five preliminary sensitisation interviews were conducted to allow the researcher to familiarise with the interview flow and content, and to allow further development of listening and probing skills (Weiss, 1995). An initial detailed interview plan was developed to assist the researcher in these pilots (see Appendix E: Study 2- Preliminary Interviewer Guide). The pilot interviews, which were audio-taped, were evaluated by the principal supervisor in conjunction with the researcher, and small refinements were made to allow more detailed probing into areas pertaining to the functional benefit, and appropriate foods.
i) Recruitment Procedures

Purposive sampling was employed to select the study participants (Charmaz, 2011). This form of sampling is common within the interpretive paradigm, and it seeks participants who will best help to understand the research problem. Consistent with the overall aim of understanding the meaning of an abstract concept statement, a sample of women who were interested and able to discuss personal weight loss related issues was pre-specified. Initially participants were recruited from members of a local Auckland tennis club and from acquaintances of the researcher and primary supervisor. Recruitment advertisements were also posted in three fitness centres (see Appendix F: Study 2- Letter of Permission to Recruit Participants). Snowballing sampling techniques were also used to recruit candidates from contacts of the existing participants (Bernard, 2000). This enabled a more heterogeneous sample of women, from differing age groups, ethnicities, geographic locations and multiple weight loss perspectives, to be included. The technique has been recommended in social science research for the study of sensitive topics (Bernard, 2000). Under the ethical requirements set out by the UAHEC, participants were not initially approached by the researcher. Instead they were invited by a third party, usually another participant, so that their participation was not seen to be encouraged by the researcher. A $50 thank you payment, in the form of a shopping mall voucher, was given to the women at the time of the interview. This payment was funded by the University of Auckland PhD Research Funding. The women participants were aged between 30 and 62 years and all resided in Auckland city suburbs. They were screened using the same criteria as Study 1, that is, they claimed to be currently attempting to lose weight. Table 10 shows their profiles. As can be seen, the participants were from varied family situations, life stages and weight profiles, and a diverse range of out-going and more private personalities, was revealed in the interviews.
<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Weight to lose (kg)</th>
<th>#Perceived Challenge</th>
<th>Occupation</th>
<th>No. of Children</th>
<th>Ancestry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natalie</td>
<td>30</td>
<td>5</td>
<td>Small</td>
<td>At home Mum/ Writer</td>
<td>1</td>
<td>NZ European</td>
</tr>
<tr>
<td>Cindy</td>
<td>34</td>
<td>*</td>
<td>Medium/Large</td>
<td>Accountant</td>
<td>0</td>
<td>Irish</td>
</tr>
<tr>
<td>Emma</td>
<td>36</td>
<td>2</td>
<td>Small</td>
<td>Electronic Engineer</td>
<td>0</td>
<td>Italian</td>
</tr>
<tr>
<td>Miranda</td>
<td>39</td>
<td>20</td>
<td>Large</td>
<td>Office Manager</td>
<td>6</td>
<td>Pacific Islander</td>
</tr>
<tr>
<td>Lydia</td>
<td>44</td>
<td>5-10</td>
<td>Medium</td>
<td>Gym Instructor</td>
<td>0</td>
<td>English</td>
</tr>
<tr>
<td>Maria</td>
<td>48</td>
<td>5</td>
<td>Small/Medium</td>
<td>Insurance Broker</td>
<td>2</td>
<td>NZ European</td>
</tr>
<tr>
<td>Leanne</td>
<td>54</td>
<td>2</td>
<td>Small</td>
<td>Graphic Designer</td>
<td>1</td>
<td>NZ European</td>
</tr>
<tr>
<td>Gina</td>
<td>55</td>
<td>10-15</td>
<td>Medium</td>
<td>Shop Assistant</td>
<td>2</td>
<td>NZ European</td>
</tr>
<tr>
<td>Jude</td>
<td>57</td>
<td>*</td>
<td>Small</td>
<td>Special Needs Teacher</td>
<td>1</td>
<td>NZ European</td>
</tr>
<tr>
<td>Kris</td>
<td>58</td>
<td>10</td>
<td>Medium</td>
<td>Production Designer</td>
<td>3</td>
<td>NZ European</td>
</tr>
<tr>
<td>Rosemary</td>
<td>58</td>
<td>2</td>
<td>Medium</td>
<td>Teacher</td>
<td>4</td>
<td>NZ European</td>
</tr>
<tr>
<td>Janice</td>
<td>58</td>
<td>10</td>
<td>Medium</td>
<td>Office worker/ Food Blog writer</td>
<td>1</td>
<td>NZ European</td>
</tr>
<tr>
<td>Rita</td>
<td>61</td>
<td>&gt;25</td>
<td>Large</td>
<td>Massage Therapist</td>
<td>0</td>
<td>NZ European</td>
</tr>
<tr>
<td>Mary</td>
<td>62</td>
<td>*</td>
<td>Large</td>
<td>Travel Agent</td>
<td>0</td>
<td>Irish</td>
</tr>
</tbody>
</table>

* Amount of weight to lose, not disclosed.  
# Discussed or interpreted from lived experiences
ii) Interview procedures

The interviews were viewed as a privileged inquiry. Due to the personal and potentially sensitive nature of the interview topic, the researcher took particular care to follow ethical and respectful procedures (Baker & Gentry, 2006). For example, prospective participants were fully informed of the nature of the interview prior to consenting. Participants were advised that they could conclude the interview at any time, and still receive the thank you payment. They were advised that pseudonyms would be used in the reporting of the findings. They also had the option to recall their data within 14 days of the interview. Participant information sheets and consent forms were provided several days prior to each interview, and the consent form was signed prior to the commencement of each interview. Participants were invited to indicate on the consent form if they wanted a copy of their transcript, the audio tape, or a summary of the completed research study. Participants were offered a range of interview locations including their own home or workplace, the researcher’s home, or the University of Auckland. The interviews lasted between 50 minutes and 105 minutes. All interviews were recorded using an audio recorder to allow the interviewer to focus on the interview at hand and to provide a full transcription record of the conversation for analysis. Efforts were made to ensure the voice recorder was discreetly positioned to minimise its impact. Given the personal accounts that eventuated, the possible negative impacts of audio-recording were viewed as acceptable.

The researcher opened the interview with a general introduction about the study. Participants were encouraged to treat the interview as a conversation to encourage a relaxed flow of information. Participants were advised that they would be viewing a new weight loss product concept statement and asked for their opinions. They were assured that the concept was completely independent from the researcher and were encouraged to be as open as possible with their views. To allow participants to relax and to build a rapport with the researcher, the interviews started very generally. Data were collected in two interrelated areas within each interview. Firstly, the opening area of discussion centred on the participants activities around food in general on the day of the interview, or the prior day. Participants were invited to discuss their personal eating routines and were encouraged to talk through their actions, thoughts and feelings. Attention was given to obtaining information regarding specific events and experiences, rather than a summarisation by the participant (Weiss, 1995). The interview was then directed towards weight loss and the recounting of current and past experiences and activities. Comments relating to hunger and self-control were probed. The same product
concept description statement (see Figure 2- Chapter 2) was then introduced and participants were encouraged to read it in their own time and then freely respond. The researcher responded to questions about the concept. The interview remained unstructured as responses were developing, and then more directed probing and semi-structured questioning about aspects of believability and future intentions regarding trying the concept were included if these were not forthcoming. Other additional functional food products purchased from the marketplace, as pictured below in Figure 10, were shown to participants and discussed towards the end of the interview if time allowed. As the study progressed, and initial participant accounts unfolded and were analysed, it was apparent that more probing should be conducted in certain areas. These included greater attention to the perceptions of personal hunger, more specific structured questioning into the believability aspects of the concept, such as the added ingredients themselves, and more detailed questioning about responses to different food carriers.

Figure 10: Additional Functional Food Products Shown to Participants

This semi-structured approach gave some direction to the interviews, but allowed the researcher flexibility to explore different angles in subsequent interviews. The data collection continued, until the decision was made that theoretical saturation had been reached after 14 interviews.

6.2.2 Data Analysis and Interpretation
A series of procedures took place, commencing after the completion of the first five interviews.

Step 1: Transcription: All interviews were transcribed by the researcher using Dragon12 voice recognition software. This involved listening to, and reading aloud, the interviewed conversations, which were simultaneously written as text by the software. Each transcript was
then checked by the researcher and software misinterpretations were manually corrected. In this way the researcher was fully immersed in the data for each interview and a familiarisation with each participant’s recording was enabled. The audio files and transcripts were stored on hard drives at the University of Auckland for safe keeping.

**Step 2:** After transcription, in conjunction with the field notes taken at the time of the interview, individual participant profiles and summaries were prepared. This initial biographical analysis came from a line by line reading and note taking of the transcripts and the development of initial codes in the context of each participant’s interview.

**Step 3:** Next, a cross-interview analysis of the transcripts was undertaken to look for developing patterns and themes (Lincoln & Guba, 1985). This was conducted by hand, to obtain coding for initial themes. A spreadsheet matrix was developed of the coding categories and their linkage to key verbatim comments. Further interpretive thematic analysis followed using the guidelines of the constant comparative method (Spiggle, 1994). This allowed focussed coding, and the categorising and collapsing of similar themes into more abstract themes, to develop overarching themes. Key themes from the lived experiences and stories were firstly finalised. The interview transcripts were also uploaded to NVIVO software to isolate common words and to provide another dimension for developing the themes. In preference the researcher reverted to hand coding, rotating between the transcripts, audio recordings, and the Excel matrix. Frequent contact with the principal supervisor was maintained in this process, and coding was conducted independently by both parties for the development of the initial themes. Researcher notes and concept maps of themes were recorded as part of this process for later reference.

**Step 4:** The interpretation of the qualitatively different ways participants went about providing explanations and rationalising their responses to the concept statement to further develop process related themes was then instigated. The focus was on the identification of contradictory and commonly occurring participant information (Klein & Myers, 1999). This was done in accordance with the key themes from the first part of the interview. As part of the overall analysis procedure, a summary biographical profile of each participant was prepared which assisted with the linkage of themes from the first part of the interview. To develop the profile, the researcher made interpretations from the interview discussions and
divided the participants into four groups based on their personal values, eating styles, attitudes to food, and motivations for eating and weight loss. (This analysis summary can be found in Appendix G: Study 2-Summary of Participant Profiles). The overall process took a hermeneutic interpretative approach cycling between the original interview audio recordings, transcripts, and the researcher notes and maps (Arnold & Fischer, 1994). Finally, the integration of the findings with the other two studies for the research took place at the conclusion of the empirical work, and is presented in the Discussion of Findings Chapter 8.

6.2.3 Quality Assurance – Trustworthiness

A key concern for all social researchers is how sound their studies are, and how well their findings represent the perspectives and views of the participants. For qualitative research, strategies to reduce researcher bias, and enhance the quality and soundness of the research, are available (Wallendorf & Belk, 1989; Lincoln & Guba, 1985). The steps taken for the present study were as follows:

**Credibility**: Credibility considers how well the findings represent the participant’s expressed views, and is considered similar to establishing internal validity in quantitative research. The transcripts were transcribed as verbatim accounts by the researcher and to ensure transparency, all are available on a USB stick for examination purposes. The original audio-taped interviews are also available on request. The coding and interpretations made by the researcher were conducted in conjunction with the principal supervisor, and these interactions continued throughout the analysis. Member checks were conducted with five of the participants with face to face conversations to check the researcher’s interpretations after the initial interviews. One participant requested a full copy of her transcript. One issue that the researcher noted in the member checking process was the defensive position of participants who had increased their weight since the time of the first interview and were concerned about how this might be regarded.

**Transferability**: The extent to which the findings are applicable to other contexts, people, places and time frames, is termed transferability, and is similar to establishing external validity in quantitative research. It helps to contribute to the development of theory (Hirschman, 1986; Miles & Huberman, 1994). For the present study, transferability would depend on the degree of similarity of other chosen contexts. The highly personal and complex setting of weight loss means that the findings are restricted to the present context, however
other appearance related contexts may share some overlap in the findings, such as body building supplements, skin rejuvenation cosmetics and hair restoration products.

**Dependability**: Whether the interpretation is consistent across the interviews and avoids instability is aligned with the quantitative testing of reliability. The nature of the in-depth interviewing process means this is more difficult in a qualitative method where every interview is specific to the participant (Hirschman, 1986). The way in which the researcher approached and conducted the interviews was, as far as possible, consistent across the interviews, where the flow of the interview, and the semi-structured introduction of the product concept, was uniformly approached.

**Conformability**: Confirmability ensures that the participants’ views are forthcoming, as opposed to those of the researcher. It is the extent to which another researcher would arrive at the same interpretations for the data (Miles & Huberman, 1994). Researcher introspection is an essential part of this process to reduce researcher bias and the development of empathy over time (Wallenorf & Belk, 1989). The generous use of illustrative quotations in the findings which follow was supplemented by the maintenance of research diaries, concept maps and records.

### 6.3 Study 2 – Overview of Findings

The findings of Study 2 are presented in three parts according to the study’s three research questions. Firstly, a thematic analysis of the personal food and weight loss stories is presented and four underlying themes are identified, which were integral in interpreting the ensuing concept judgments. The second section of the findings interprets the primary ways in which women constructed their judgments, and discusses how they were influenced by their diverse experiences and perspectives. The third section concentrates on the way in which the women responded specifically to the semi-structured questioning about their behavioural intentions. Figure 11 summarises the structure of the areas of findings.
6.4 Study 2 – Findings and Discussion: Part 1- Lived Experiences

RQ.2.1: How do women experience their eating and weight loss activities?

The unstructured conversations about food, culinary habits, and weight loss activities stimulated considerable reflection by the participants. Substantial differences in perspectives were revealed and insight was gained into how participants described themselves, viewed their motivations, and dealt with their specific difficulties and challenges. Within the relatively small sample a span of activities, diverse regimes, and approaches were experienced (Haynos et al., 2014; Putterman & Linden, 2004). A fluctuating pattern of weight loss and weight gain was commonplace. For many, the weight loss journey had been ongoing since their early years. Many participants recalled their efforts and experiences in personal detail, indicating the relevance of weight loss within their lives (Beruchashvili, et al., 2014; St James et al., 2011; Thomas et al., 2008). Four overarching thematic areas were interpreted for integration with the subsequent sense making about the product concept. These are diagrammatically represented in Figure 12, along with their subthemes, and are discussed below using verbatim illustrations to substantiate the interpretations.
6.4.1 Identity

People are known to identify themselves in relation to many aspects of their lives including other people, situations, and behaviours (Reed et al., 2012; Swann & Bosson, 2010). From this, the narrower concept of a food identity has been identified which is fundamental for understanding food choice. It holds multiple and complex dimensions, from preferred personal eating behaviours, to social categorisation (Bisogni et al., 2002). In the present research many participants had built up a picture of themselves over time, which was revealed in the ways they described themselves regarding their overall eating habits and their weight loss behaviours. This picture was in some cases regarded as fixed and permanent, whereas for others it was evolving within their lives. Two contrasting sub themes were interpreted and these are discussed and contrasted below.

**Food Purism:**

Because discussions about food and weight loss practices are situated in a broader cultural ideology, they often convey value centred aspects of what is thought to be desirable and or morally right, and have implications for identity construction (Hitlin, 2003; O’Key, et al., 2010). Several participants identified themselves as holding fundamental philosophies that food should be ‘natural’. This meant it should be derived from its original source as nature intended, with as few additives as possible.

Natalie (30) identified herself as a food purist demonstrating mistrust over the principles, integrity, and practices of food corporates. She saw ‘cynical’ marketing tactics as
contributing to the overweightness issues in current society. These tactics were completely at odds with her desire for a return to unprocessed and organic food consumption. Food manufacturing companies were construed as dangerous, conning people into the belief that they were eating well. She commented that: “Unilever are evil, everyone knows they are evil... My firm belief is that we need to go back to eating proper food”. Food marketers held undesirable meaning for her and were rejected because of their incompatibility and lack of congruence with her moral values (Johnson & Stewart, 2005). This perspective is reminiscent of anti-consumption views found in other contexts (Banister & Hogg, 2004; Hogg, Banister & Stephenson, 2009).

Janice (58) used the aphorism “if your Grandmother wouldn’t eat it, then you shouldn’t” expressing nostalgia for a previous era of unprocessed food. She writes an educational food blog with over 15,000 followers, in which she aims to help teach younger people the value of healthy eating such as eating seasonally and being in tune with nature. She despaired over the junk food habits and the poor nutrition knowledge of her overweight co-workers. This desire to spread the word and assist others to adopt messages has been observed from a desire to ‘proselytise’ about food from one’s own knowledge base and values (Beruchasvili et al., 2013). She felt that science had an agenda to prove itself, giving the example of how scientific testing had discounted herbal remedies without accounting for their longitudinal effects. She saw unhealthy calorie laden food as freely available, yet morally wrong. An aversion to processed and refined food was also illustrated with a more personally directed focus. Lydia (44), a fitness instructor, having always battled with being “massive”, now embraced a rigid fitness and diet routine involving eating a mix of protein powders and vegetables, with no carbohydrates. She totally avoided processed foods, in which she included sugar, and was aware of the disguises that manufacturers use to hide sugar in their food products.

Nature has previously been represented as a self-balancing system, a force that is best left to its own devices, which is under threat by science and man’s tinkering (Hansen, 2006), and this was reflected in the thinking of several participants. Consumer desires for food purity and ‘naturalness’, along with the development of modern food worries, are substantial trends arising from greater consumer awareness of the growth of food processing, and the presence of bio-technology in food manufacture (Devcich et al., 2007; Grunert, 2013; Kristensen et al., 2013). The positive and powerful connotations of the word ‘natural’ are recognised in food
consumption (Rozin, 2005; Rozin, et al., 2004). Rozin et al., (2004) showed that a substantial part of this preference for natural entities over those produced with human intervention is concerned with moral or aesthetic ideals, rather than instrumental properties such as sensory properties. People show a preference for what is ‘natural’ across a number of domains and this resonates with deeper values of authenticity and a sacred reverence for nature (Belk, Wallendorf, & Sherry, 1989). Other verbatim comments are illustrated in Table 11, reflecting this personal identification with the importance of ‘nature’ in ways of thinking about food.

**Table 11: Illustrative Quotations – Food Purism**

<table>
<thead>
<tr>
<th>Quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I get frustrated about how they (science) say that organic food isn’t any better than other food. I mean fresh food is the best of all. (Janice 58)</td>
</tr>
<tr>
<td>It’s scary, there are a lot of additives in food. Since I’ve been doing some reading up about it, the interesting thing is you hear all these people, that say they didn’t realise what it was. And the Dr said it, and they stopped having them. And then (clicks fingers) and all their symptoms disappeared. They had even sore joints, arthritis. These additives are really bad for some people …Because I’m aware of all additives, and rubbish, and the muck they put in food. (Kris 58)</td>
</tr>
</tbody>
</table>

Discussions on food fortification in functional foods embodied this line of thinking. Such foods were seen to go against values of purism and respect for the power of natural forces. Natalie (30) was suspicious and would “avoid them like the plague”, because they are so removed from “proper food”. Lydia commented that she wouldn’t touch fortified margarines or yoghurts, seeing them as “a load of crap”. This was a notable comment, given the central role of protein powders in her current diet. Concerns over the involvement of technology in food were echoed by several interviewees, with negative references to food processing, food additives, and genetic engineering. These comments showed consumer’s alternative construal of ideas about food systems, ingredients, and food processing.

**Food Hedonism:**

In contrast, several women, first and foremost, identified themselves as food lovers, valuing the pleasure they gained from food, particularly that provided by the taste of food. Sweets, cakes and chocolates were viewed as indulgences in life, which although recognised as ‘bad’ or indulgent, were frequently sought when gratification from food was needed. They gave themselves permission to go against perceived societal imposed restrictions. As Jude (57) remarked:
“I have a bad time of the day. And I’ve never done anything about it. On the way home from work. I usually have things in the car. And in the freezer I have an ice-cream container marked ‘broad beans’ for my chocolate stash. I usually have chocolate in the house, so I do a bit of a panic if there is none”

This alignment of food with pleasure appears widespread, with previous research identifying taste as central in food choice, second only to healthiness (Grunert, 2013). However, as Biltekoff (2010) has theorised, this pleasure seeking orientation can lead to conflict for consumers, where, in seeking pleasure, people can see ‘good tasting food’ as bad for them. In the present research, in contrast to this, these participants, although observing that their food choice had ‘bad’ connotations, were completely comfortable with their decision to eat what they regarded as unhealthy foods for pleasure. Healthier versions of foods, such as low fat yoghurts, were perceived as being lower in flavour and texture, and not congruent with their identification with the enjoyment of living and freedom from restrictions. Mary was not at all concerned with the processing of food and had been known to drink two litres of diet coke a day. She commented:

“It (food) can be altered as long as it’s still got the taste to it”

Within this overall theme of hedonism, however, was also a deeper desire for a return to more ‘wholesome times’. Nostalgia for more traditional foods, such as, home-baking, was evident. It was though that food used to taste better, and this was identified with a time when life was simpler, and where life’s pressures were less evident. As Gina (55) explained:

“I think it’s all on the taste. If I don’t like the taste you are never going to get me to eat it. Because I don’t actually like funny flavours. If someone puts a carob something in front of me. You can forget it … I don’t like stuff that doesn’t taste like what I was brought up on. I’m not that keen on odd flavours, I quite like coconut, but why would I drink coconut water? I don’t need it. ... I like good honest Kiwi stuff. I’d rather have the meat off the farm. Not this funny stuff I wasn’t brought up on.”

Being a “sweet tooth” was a common self-classification and this implied an inborn weakness for certain foods, which was difficult to counteract. Several women confessed they often lacked willpower because of this. Mary (62) commented:

“I have had a sweet tooth since I was five. I eat everything that’s sweet. Yea terrible, terrible. Chocolate, I am just a disaster on.”

Although they tried to lose weight at different times, those identifying as ‘food lovers’, largely saw their enjoyment of a hedonic lifestyle as more important. Cindy (34) made lifestyle choices that included the frequent enjoyment of alcohol at the tennis club, eating
takeaways late at night, and sweet treats. Although these women saw themselves as easy going about food, and not always totally committed to weight loss, there a conflict between balancing the desire to be seen as sensible eaters, with the freedom to indulge their inner personal cravings to enjoy their pleasures of food (Belk et al., 2003). They recognised the cultural forces of needing to show one is not overindulgent, but had become relaxed about their weight loss, choosing to ‘crash diet’ for special events such as weddings. They could diet in the short term, but then often saw themselves as weakening when their ability to self-regulate became reduced and worn down over time (Muraven and Baumeister, 2000). This pattern allowed values of hedonism to be satisfied for a time, whilst satisfying the socially important need to be seen to be seen as moderate by others (Bearden & Etzel, 1982).

6.4.2 Control Perceptions

The second recurring theme concerned the differing ways in which self-control was perceived in eating and weight loss experiences. Given the widespread availability of food and its immediacy within the home, the need for self-scrutiny and discipline regarding weight loss activities pervaded the interviews. Ways of thinking were revealed to be broadly distinguishable between those who identified themselves to be in, or out of control.

**Out of Control:**

The propensity to eat for reasons other than physical hunger was recognised, with several participants relating their stories of being out of control. These women identified themselves as emotional eaters who could enter into bouts of eating in an uncontrolled manner. Kris (58) spoke about her long history of yoyo dieting, having tried many dieting regimes. She had analysed her own tendency to overeat as a problem caused by her mind, which had lost contact with her body signals, which then led her to be out of control. Her self-reflecting thoughts were in line with those of restrained eaters, who have continually tried to restrict eating, but found this to be unsuccessful (Bublitz et al., 2010; Herman & Polivy, 1980; van Strien et al, 1986). The personal recognition of having lost touch with physiological hunger signals, and episodes of eating when not hungry, due to both situational and tempting food cues, were extensively elaborated upon. Rosemary (58) and Rita (61) both gave detailed accounts of their eating episodes which were directly related to emotional events and appeared to stem from guilt related to past overweightness. Rosemary, despite only now wanting to lose 2-3 kgs, and being in a normal weight range, saw herself as an emotional eater, but one who was very concerned with her weight and appearance. She constantly
monitored her weight on a daily basis even when little change was expected, as a way of exhibiting personal control to herself. Lydia (44) also discussed her longstanding issues around general compulsiveness, describing herself throughout the interview as “a binge eater”, a “diet coke addict” and a “classic binge drinker”. Binge eating is thought to be motivated by a desire to escape from self-awareness. Eaters of this type often suffer from the setting of very high personal standards, combined with a heightened sensitivity to the expectations and perceived demands of others (Heatherton & Baumeister, 1991).

Perceptions of not being in control can also be attributed to an irresistible power, and for some this is seen as a force external to the individual (St James et al., 2011). Cindy (34) felt her lifestyle was out of control. Interestingly, she tended to attribute her control issues to external situational forces rather than her own personal administration. She explained that healthy food was less likely to be available late at night when she suddenly found herself being hungry:

“Like I know you are not meant to eat late at night. But the fact is I end up doing it. You’ve always got McDonald’s at the end of the street. And it’s open all the time. But you don’t get Pita Pit open all the time. Some of its availability I reckon.” and,

“If you’re living at home with your parents. Or if there is someone else there like a partner to organise it for you. Then it is sorted. So it’s those times when you’re not organised. And then you know like, stuff it. I’m starving, just go to McDonald’s. 10 o’clock at night. It’s not ideal.”

Under Control:
In contrast, there was self-identification with being largely in control, pragmatic, and sensible when it came to food and weight management. This was typically associated with a high level of food knowledge, and high involvement in seeking new information about food and nutrition. For these women, craving and hunger, although occurring sometimes, were not seen to be a personal and overriding issue. Leanne (54) and Maria (48) felt capable of adapting their routines when they needed to lose weight. Interestingly, both stated that they did not get particularly hungry. They saw their weight gain as being largely due to body changes associated with hormones, and they recognised they had to cut down on food because their body required less energy. Emma (36) an engineer, who was highly knowledgeable about exercise, nutrition and food, had put on weight because of going onto the contraceptive pill. She attended classes on nutrition, wanting to fully understand her body’s needs from an analytical perspective. These women were realistic as to what was
involved to achieve their weight loss targets, and believed they would succeed if they followed their prescribed plans.

Their recounted experiences and views support previous research which has highlighted that self-control and self-regulation are individually based traits (Haws & Redden, 2013; Redden & Haws, 2013). They were interpreted as having a self-belief and personal mastery of their situation in line with the self-efficacy and agency concepts that run through social cognitive and appraisal theory literatures (Bandura, 1997; Johnson & Stewart, 2005), and they exhibited effective control strategies. The existing literature on successful weight losers views certain behaviours characterising greater success with longer term weight loss (Stroebe et al., 2013). That is, some individuals appear to have unique psychosocial and ingrained capabilities better suited to self-monitoring, self-control and coping strategies (Belsky, Epel, & Tomiyama, 2014; Redden & Haws, 2013). As Leanne (54) commented:

“I’m not really a person that gets very hungry ... Because it is really in your hands, is it not? You decide what you put in your mouth or whatever. All you need to do is rationalise, you know, like a normal person, and let common sense prevail.”

6.4.3 Motivation

The initial stories also provided insight into the complex motivations behind the desire for seeking weight loss and hence, conducting weight loss activities. Like those in Kwan’s (2009) study of weight loss motivations, participants held diverse and varied reasons which included both health and appearance related motives. Setting an example towards the long term health of her extended family was the overriding motivation for Miranda’s (39) activities. As observed by Kwan (2009), however health and appearance motivations can overlap, and this conflation was frequently illustrated in the current research. Maria (48) explained her health and wellness related motivation in which aspects of her appearance consciousness and body/image requirements were revealed:

“Because I think when I was young I played every sport going. And I did body building. I was at the gym a lot. And I am used to my body looking a certain way. Even though it’s nothing like it used to look. I like to look reasonably fit and healthy and if I start to put on weight, I don’t think that looks very healthy. Probably got more of an issue of wanting to stay reasonably slim as I get older because I think putting on weight ages you, do you think?...I’ve always been very conscious not in a vain kind of away, but more just a healthy way, to keep reasonably healthy. Like I’ll see a tall woman in the street, and you know she is in her 60s, and you think ‘doesn’t she look good for her age?’ Looks like she’ll go on for a long time.”
Kris (58) also had complex reasons for wanting to lose 10kg, as she recounted:

“I think it’s important to look good, yea because, even though we don’t all say it, we would all like to be a bit slimmer. I’d like to be a little bit, I’m not wanting to be skinny any more. But I would like to think that I would lose, I know it sounds a lot, but I’m probably about 10 kg overweight. And it’s all sitting in that bad area for me, which is around there (indicating midriff) which is not good for your heart. So I would like to lose the weight. Not only then I’d fit into my nice clothes better, and I’d get it off my bust. I hate having big boobs. Also it would be a health thing too.”

Cindy’s (34) comments also convey this intersection, and include the underlying association of overweightness with a reduced chance of forming a personal relationship:

“I think it’s important to look good, and for health. I don’t want to be obese and get diabetes. I don’t want to have a heart attack that kind of thing. Just the same as, like I don’t really want to smoke, as maybe you are going to get lung cancer, and. it’s a slow death. I don’t find it that attractive, you know, and maybe as you get older. like, I’m not really that young now, and I don’t have a partner. So maybe if I’m going to be fat, then nobody will like me.”

Further to this, the stigma of being overweight was closely associated with a reduction in one’s self-esteem, and was a motivator for weight loss activities. Rosemary (58) who had 2kgs to lose found it incredibly important to maintain her size due to past comments from her brother, a GP. He had given her a magazine on obesity as a ‘subtle’ hint, when she was considerably heavier earlier in her life. Being overweight testified to her inability to exert self-control (Polivy & Herman, 2000). Janice (58) also associated weight loss with personal confidence, and commented:

“Like, when I gained 5 kg. I felt awful. Your confidence goes, because you know you don’t look good in anything.”

Most participants, at different times throughout the interviews, focussed on evaluating how satisfied they were with their current self in comparison with their desired self (Granberg, 2006; Markus & Nurius 1986; Markus & Wurf, 1987). This was typically observed to be appearance focussed, reflecting prevailing body image concerns. Such appearance motivations were interpreted as being instrumental in achieving other socially related outcomes such as a sense of self-worth and confidence (St James et al., 2011; Thompson & Hirschman, 1995). For example, Emma (36), a highly qualified electronic engineer also revealed she valued her appearance because it provided a sense of control and confidence. In her workplace, in which she was the only female, her male colleagues frequently made body image related comments, and she believed maintaining her appearance helped shield her from these episodes, which she found distasteful. She commented:
“Well it was important because, I like the gym. I like to take care of my body. And when you see that everything has just vanished because of the pill, you say, ‘Now this is not right’. And so you feel less confident. Because I’ve got a lot of trouble in feeling confident, and things like that. So for me, feeling fine with my body is the first step. Because it is one problem less.”

Emma’s construction of her personal need to control her body also demonstrated the way this then asserts wider control over other unrelated aspects of her life, and is in line with previous literature where control over one’s body weight is seen as synonymous with overall self-control (Thompson & Hirschman, 1995).

Motivations to undertake behaviours in the pursuit of goals have also been theorised as influenced by the regulatory focus of the individual (Higgins, 1997). Two contrasting strategies are the avoidance of an undesirable state, and the approach towards one that is desirable. In the present study examples of both approaches were evident. For Rita, the motivation to lose weight was interpreted as driven by a desire to avoid the perceived stigmatisation and judgements from others (Granberg, 2011). She gave a detailed account of the perceived stigma she had experienced over a long period, and how it had affected her life, recounting:

“When I went out, it was torture. I was putting a mouthful of food in my mouth, and I was sitting there cringing, thinking that everyone in the restaurant was thinking, ‘What’s that fat girl doing eating?’”

In contrast, Cindy (34) had a more positive and approach driven motivation. Her aspirational perspective was revealed as she commented:

“Everybody tells you, you are losing weight and stuff and you feel good... Yea, I’d like to be thinner, I’d like to be richer, I’d like to be further up the corporate ladder, would like to have more shoes, I’d like to go overseas more. It’s kind of like that.”

6.4.4 Personal Challenge

Several participants highlighted their experiences of living with the pressure of weight loss through most of their lives, and revealed in their accounts the different personal challenge of trying to lose a large amount of weight. Their stories and experiences were highly individualised as they accepted and dealt with their challenges. However, interestingly, as will be shown, they each responded differently to the concept in question. As found in Study 1, the responses of those with a large amount of weight indicated a higher desire to try the foods, however, a lower belief in them. Rita (61) was highly challenged by the process of
Chapter Six

engaging in weight loss activities. She decided that she had a love/hate relationship with food and her own lack of control had clouded much of her life. A sense of despair and an impression that she was running out of patience was evident in her interview. This sense of inevitability has been attributed to individuals construing that they have an underlying predestination to be overweight (Beruchashvili et al. 2013). Her challenge was difficult because of the constant presence of food in her life. Having recently become engaged she was wishing to lose at least 25kg, although was not confident in this outcome. Her coping over many years had evolved to trying to understand herself, and to work with her own body, attempting to focus on allowing her body to find its own internal source of control.

Miranda (39), a Pacific Islander with six children, had a distinctive story which contrasted with those of most other participants. The added cultural challenge she faced appeared to compound her weight control difficulties. Currently working two jobs as an office manager and a checkout operator, she had a strong desire to improve the dietary habits of her children and extended family. Her challenge lay in an identity conflict between the need to conform to her traditional family upbringing, and her more recent experiences of a strict exercise and diet routine. Under this regime, with her workplace colleagues, she tried to counteract her perceived highly overweight status. She had gained high nutrition knowledge and was involved in developing an exercise program for other Pacific Island women in her community. However, conflict was felt with the habits and beliefs of her extended community, where eating heavy high fat meals late in the evening is a common and culturally significant occurrence. She saw their food choices as erroneously being made for budgetary purposes, where cheaper foods were valued for their bulk and volume, rather than their nutritional merit. Although she had previously lost over 20kgs, this had recently been regained, and she was now attempting to hold a longer term lifestyle approach to her weight loss activities, rather than her previous ‘quick fix’ approach, which had previously failed her. Her different insights supplement the explanations for the present research. However, understanding the important role of weight loss activities within the cultural practices of Pacific Islanders was outside the scope of the present study and deserves considerably longer treatment.

6.4.5 Summary of Part 1

In summary, the ‘grand tour’ stories indicated great diversity in weight loss experiences and the degree to which the women recognised their own patterns, attempted to cope with them,
and accepted and dealt with their challenges. The 14 interviews revealed contrasts in food identity constructions, perceptions of personal control and weight loss/ body image motivations. Although, the contemporary drive of achieving lifestyle change and self-improvement for overall health and wellness was observed, implicit socio-cultural influences about the value of appearance, and its relationship to self-esteem, and the stigmatisation of the overweight remained very influential (Hesse-Biber, 2007; St James et al., 2011; Whale, et al., 2014). The next section turns to the way in which the product concept of “fuller for longer foods” was reviewed by participants, against the background of these individual experiences and perceived personal challenges.

6.5 Study 2 - Findings and Discussion: Part 2- Sense Making Processes

The second research question for Study 2 (RQ. 2.2) asked: How do women, seeking weight loss, judge whether the concept of the foods is believable for them? The focus of the interpretation was on the multiple and differing ways of thinking about the ‘fuller for longer’ benefit described in the concept statement, in terms of its personal believability. The viewpoints and perspectives were interpreted in consideration of underlying personal experiences. Five interlinked processes are depicted in Figure 13 and discussed below.

Figure 13: Areas of Findings-Part 2

6.5.1. Embedded Scepticism

The presence of scepticism towards marketing claims is a widespread phenomenon which has been demonstrated empirically in several contexts including health claims (Morel & Pruyn, 2003; Tan & Tan, 2007). Although marketing exaggerations are to an extent expected by consumers (Haan & Berkey, 2002), this has contributed to the development of generally sceptical consumers who tend to be pre-disposed to disbelieve and mistrust advertising and marketing claims in general (Koslow, 2000). This tendency was common in the initial sense
making, and arose from viewpoints about the weight loss consumption marketplace as illustrated in Table 12.

Table 12: Illustrative Quotations -Initial Scepticism

<table>
<thead>
<tr>
<th>Quote</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>“They are lying. Because they want you to buy their products to make money. I think it’s probably a private food company that, I’m naturally a pessimist when it comes to things like this (laughing). Generally if it’s too good to be true, it is. That’s my philosophy with a lot of this kind of blah.”</td>
<td>Leanne 54</td>
</tr>
<tr>
<td>“I am a little bit sceptical on things like that because, I think that the people that will benefit from it are the people that are cashing in on it. They will be the ones that get the true benefit of it.”</td>
<td>Kris 58</td>
</tr>
</tbody>
</table>

Leanne (54) held a cynical position as a protective response against marketing communications in general and did not want to be perceived as gullible. Her views about the persuasive tactics of marketers was ingrained and impacted on her initial response (Darke & Ritchie, 2007; Ham, Nelson & Das, 2015; Koslow, 2000). The degree to which a person has a propensity to trust or be sceptical is posited as an individual trait influenced by experience and personality (Dunn and Schweitzer, 2005). People who see themselves as sceptical see it as important to respond in a cognitively corresponding manner (Tedeschi, Schlenker & Bonoma, 1971). Leanne had previously indicated that she had felt stigmatised due to her body/shape, which is likely to have contributed to her overall defensive position. Resistance to persuasion strategies such as the use of contesting strategies, are a way of finding personal empowerment (Friestad & Wright, 1994; Ham, Nelson & Das, 2015). She construed that the media and marketers in weight loss related industries were seeking financial gain by deliberately exploiting and targeting women in particular due to their body/image concerns. She recounted:

“Another one that really made me chuckle was how Kate Middleton lost 20 kg for the wedding. She didn’t have 20kgs to lose for God’s sake, you know, engage your brain people... They are targeting, vulnerable, desperate people, that’s how I see it.”

Kris (58) also saw commercial weight loss programs as potentially exploiting consumers she identified with, commenting:

“That’s why Weight Watchers and Jenny Craig and all these products make so much money. Because it is such, trying to think of the word now, it’s a body image thing.”
Rosemary (58) used one short, but complex sentence to convey her initial doubts about the concept foods, exhibiting a default reaction to marketing claims, combined with a potential hopefulness that there could be a possible solution to which she should remain open. She remarked: "First response would be promises, promises; second, sounds marvellous"

In contrast Rita (61) began from a defensive position driven by her previous experiences and challenges with weight loss, and began with a pessimistic response, commenting:

"Ok. My immediate response is, how synthetic are they, how much are they going to cost, and how bland are they going to taste. They would be my three things. I’ve done Jenny Craig, I’ve done, I’ve done shakes things, I’ve counted calories, I’ve done carbs, low carbs, I’ve done high proteins. I’ve done food combining."

This negativity was interpreted to be a reflection on her personal weight loss journey and past disappointments, rather than an inherent scepticism of marketing claims. Interestingly, as will be further discussed, despite these initial sceptical reactions, all the above participants later indicated they would be willing to buy and try the proposed foods, albeit in a pessimistic fashion for some. Initial sceptical responses were less evident from younger participants who were more open to considering the concept. For example Cindy (34), found the idea reasonable, commenting:

"Ok, so it doesn’t sound like completely way out and ridiculous."

6.5.2 Compatibility Assessment

Implicated in the initial sense making appraisal, was the primary need to identify whether the proposed foods were deemed to be acceptable, morally right, and compatible with underlying values and personal theories (Johnson & Stewart, 2005; Lazarus, 1991a). When considering personally significant new information, the degree to which it is perceived as morally compatible accounts for different emotional responses by different individuals (Johnson & Stewart, 2005; Smith & Ellsworth, 1985). For Natalie (30), who identified as a food purist, conflict with her core personal values was immediately realised and the concept was totally rejected:

"Arrghhh. This is the problem with everything. If you eat unprocessed food, if you try and make sure you are eating, you are not going to be hungry and that’s before you even started eating some rice or some oats. You are not going to be hungry. What are they talking about? If you have fish or meat on top of all that, fruit and vegetables, you are not going to be hungry. It’s not that hard, it’s like, ‘Ohhh...I’m still feeling unsatisfied.’ Like everyone knows if you eat like, a giant bowl of brown rice and
broccoli and leaves, you will feel really full and you don’t feel weird and sugary. You just feel good and normal.”

Natalie saw the concept as representative of processed foods which she viewed as having a negative impact on the metabolism, thereby unsettling natural body rhythms. She elaborated on her perception of the unfair situation that consumers were presented with, commenting:

“I think this is a concept that people are being sold, that, it is really difficult, so we are making something new to help you. They don’t need to make anything new. Just eat some lettuce, eat a whole head of lettuce and some brown rice and see how hungry you feel. You won’t feel hungry, you will feel stuffed!”

This provoked emotional anger due to her appraisal which was directly at odds with her personal human value oriented beliefs (Smith & Ellsworth, 1985). She believed that companies are motivated by self-interest, and her distrust of corporations and their motivations firmly coloured her judgement (Mohr, Webb & Harris, 2001). Janice (58), also a passionate advocate of healthy eating as the enduring way to lose weight, was concerned that the proposed product concept wouldn’t solve wider societal problems. She articulated the need to understand the reasons behind why people are overeating, rather than providing a solution that took away individual responsibility, explaining:

“My initial thoughts? I’m thinking, I know about those things. Making your appetite less, breads and cereals... The only thing I wonder about, is habit stronger than hunger? You know, there is a, like, giving yourself mental treats, and maybe people aren’t hungry, they are bored. It doesn’t, like, the person still has to make the conscious decision that they need to lose weight, or change their diet.”

Her way of thinking about the concept was altruistically focussed on how it might help others, as she further elaborated:

“Well, it would get them over those hunger pangs, because basically they are going to have to get rid of junk food, which is so high in calories anyway, aren’t they?... That food is poisoning you, you are not going to lose weight unless you change your diet. That’s what I don’t like about that Jenny Craig. Everything is reliant, it’s all prepared stuff. I guess it is a stop gap, but what happens when you go off that. You have to be able to change your habits it’s a lifetime thing really isn’t it... I guess it would have filled your stomach, but it just makes you preoccupied about food. I find if you do have a healthier diet, make yourself eat fruit instead of other stuff, try to have healthy food, you don’t get cravings. And that is the cycle that you have to stop.”

However, unexpectedly, despite these reservations, she was happy to learn further about the product concept and later in the interview expressed that she might try the foods herself as a way of assisting her short term weight loss and appearance driven motivations. This
demonstrates a compartmentalisation of her self-identities and also the role of motivational forces within her personal sense making. On one hand she altruistically desired to obtain improvements for others, whilst on the other personal self-enhancement motivations were also operating (Reed et al, 2012).

For Lydia (44), an immediate incompatibility was apparent because of her concerns about the suspected processed nature of the foods. She construed them to be incongruent with her current identification as an eater of strictly unprocessed food, and her extreme exerciser self-image. For example, she commented that she wouldn’t touch canola oil because of its highly processed nature, and would only eat bread that was made form purely natural sprouted ingredients. Her appraisal of the personal significance of the proposed concept was based on a lack of goal congruency (Smith & Ellsworth, 1985). Her immediate goal of short term austerity had been set as the most efficacious means of preventing her tendency to lapse into uncontrolled eating. Therefore, the introduction of other foods, such as a fortified bread or cereal was not able to be incorporated, even if they had a ‘fuller for longer’ benefit. However, again she also later indicated that she might try the foods in the concept, but, the decision to try or not, would totally depend on and how processed it was.

Miranda (39) identified as a Pacific Islander and as a leader for improving the health of her extended family. She foresaw compatibility issues for her wider collective community with the prevailing traditional culinary practices and eating habits. She formed her own judgement based on the presumed lack of congruency that others would hold for the foods. In summary she commented:

“I know with us Pacific Islanders, we don’t adjust to changes like that.”

In seeking answers to these compatibility alignment issues and how the benefit of the fuller for longer foods concept might work, she noted the extended family’s cynicism to existing weight loss advertising which featured a Pacific Island celebrity. For herself there was a major conflict with her anticipations of the expected price of the proposed foods, as she commented:

“At the moment I don’t have the money to spend on those diets when I could just as easily go for a walk around the block twice a day in the morning and in the afternoon. That’s more effective than spending money on buying a product that I don’t know... But if you have a young family like us Pacific Islanders, we all do have young families, its very hard, and it always come down to the budget for us. Why try something that will cost you a lot of money, and you won’t benefit at the end of it.”
Different cultural meanings have been observed in understanding hope (Wang, Joy & Sherry, 2013), and self-concept (Chang 2010), and Miranda’s responses indicate important differences in the construal of believability for herself as it relates to her extended family. However, interpreting these differences lies outside the scope of the current study. The blend of individualism and collectivism for a specific cultural group is likely to be exclusive to that group and requires a far more thorough investigation of these aspects of the judgement process.

In contrast, for Jude (57), personal compatibility issues did not arise and instead initial assessment was based on her cognitive rationale made in regard to the properties of the foods. She checked firstly whether, it had “horrible chemicals” in it and decided it “sounded good.” The concept made sense to her because they offered her an option to not be hungry, at times of the day when she felt more control was needed. Mary (62), a food hedonist, also found a sense of compatibility, but it was contingent on the taste of the foods not being affected. She recognised the role of fullness and she saw enhanced satiety as a benefit that would work for her:

“That would be great!! The first thing that came to my mind is yeah,. I’ve had takeaways and I still don’t feel full an hour later. And you notice that the next day. Because you wake up hungry. Whereas if you’d had a proper meal, you don’t feel that way.”

The alignment and compatibility with personal identities was also revealed in projections participants made about the type of people that would buy such products. The verbatim quotations shown in Table 13 demonstrate the association with stereotypical categories who compared negatively with the participant’s own self-concept, and who were perceived as social out groups (Tajfel & Turner, 1979).

<table>
<thead>
<tr>
<th>Table 13: Illustrative Quotations -Social Identity Comparisons</th>
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<tbody>
<tr>
<td>“Loads of people would buy them… I don’t think a sexy man would buy this bread. Insecure people would buy this bread… Its not the kind of thing that people like me buy.” (Natalie 30)</td>
</tr>
<tr>
<td>“People who are very image-conscious, body conscious. Um, middle to higher socio-economic, women perhaps? Or people with quite low self-esteem and body image and, are a little bit desperate to change the way they look.” (Leanne 54)</td>
</tr>
<tr>
<td>“Chubby people. People that have been on diets all their life, and nothing has worked, and they want have another turn. Because that is how you think.” (Gina 55)</td>
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</table>
In previously discussing weight and body image, it was common for comparisons to be made with others who had more serious weight issues. For example, Cindy (34) provided stories of her friend, who was considerably overweight. She directly made comparisons between her own food behaviours and those of her ‘out of control’ friend, against whom she felt she compared favourably. Natalie (30) contrasted herself against other groups of people who she didn’t identify with, who she felt were vulnerable groups who would be preyed upon by the marketing profession. Underlying these judgements were socio-cultural expectations of being seen to be in control, where a lack of control was regarded as a personal irresponsibility (St James et al., 2011) To be seen to need additional agency from an external entity, such as a fortified weight loss food, was in this case interpreted as a recognition of not being unable to control oneself, and would thus, symbolised association with a stigmatised outgroup (Belk, 1988). For Rosemary (58), the concept was viewed as valuable for assisting with ‘the obesity epidemic’, which she did not identify herself as being part of. However, having disassociated herself from being seen to have a severe overweight issue, she could see herself trying it.

“I like the fact I suppose, you said you were from the University so this is research, this is not someone I hope jumping on the bandwagon to make a lot of money. So, to that end I think it would be marvellous. I don’t personally think I need it, but I would still probably, if I was in one of my good weeks, I would try it.”

Therefore, across the 14 participants, the differing appraisals of compatibility stimulated differing emotionally based responses. These ranged from an angry response due to a fundamental misalignment of personal significance, to a more positively valenced emotional and hopeful response. Overall, if incompatibility issues were not present, there was a predominant openness in the appraisals.

6.5.3 Risk Perception

Consumer perceptions of uncertainty, risk and the consequences of impending product usage, has been the subject of considerable research in contexts associated with food technology, such as functional foods and the use of gene technology (Brunel & Pichon, 2004; Dholakia, 2001; Gupta, Fischer & Frewer, 2011; Frewer et al., 2003; Mitchell, 1999). Participants voiced initial concerns stemming from their perceived uncertainty about the way in which the proposed foods would be manufactured and/or fortified. These were interlinked with an expressed desire for a return to greater naturalness in food consumption (Devicich et al., 2007; Teratanavat & Hooker, 2006) which is an emerging theme that runs through the functional foods literature (Frewer et al., 2003; Popa & Popa, 2012). Negative references to ‘chemicals’
and ‘drugs’ were recorded, with the proposed foods being associated with the unknown dangers associated with food processing itself.

As theorised by previous authors, assessments of risks can be made on several levels. For some the basis is a broader ‘worldview’, where social concerns take precedence. In the present research this was indicated from the viewpoint of participants who held purist views on food source and manufacture. They voiced concerns about the domination of manufactured processed foods in the food chain. Risks can also be envisaged on personal levels, regarding risks to one’s personal health from product usage (Herzenstein, Posavac & Brakus, 2007; Dholakia, 2001). Consumers also weigh possible risks with the likelihood of personal benefits, and their assessment depends on the sufficiency of information (Fischer & Frewer, 2009). Table 14 illustrates the differential nature of the concerns regarding the possible risks of the proposed foods.

Table 14: Illustrative Quotations - Perceived Risk Orientation

<table>
<thead>
<tr>
<th>Perceived Risk Orientation</th>
<th>Illustrative Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal</td>
<td>“Yes, healthwise, because it’s probably going to be processed beyond recognition, and you would have to ask the question about um, you know, the health implications of that... Because there has to be some modification process, surely.” (Leanne 54)</td>
</tr>
<tr>
<td>Worldview</td>
<td>“What does that do to us? ... I mean you can meddle with things, foods been developing for centuries, you have to ask the question, ‘is that going to set off something else?’” (Janice 58)</td>
</tr>
<tr>
<td>Benefit Efficacy</td>
<td>“I know so many children with allergies. I just wonder about tampering with the food chain and what affect that has on people?” (Jude 57)</td>
</tr>
<tr>
<td></td>
<td>“Having taken it out of one thing and shoved it in something else, is it still efficacious? If that is the word.” (Rosemary 58)</td>
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</table>

In the present study, the complex judgement between the potential benefits and risks of the introduction of technology into food gave rise to certain paradoxes (Bitlekoff, 2010). Rita (61) wrestled with the potentially invasive role of science in the proposed foods:

“So science itself is okay. I’ve learnt to have a healthy respect. I studied science, but then I became anti-science... So this (pointing to the proposed concept) then I’ll look
at it and I’ll read it about it and see about it. My initial reaction is I just don’t want to know. Just like I loved nashi pears until I discovered that they were a man-made creation, and I stopped eating them. I haven’t had one since. But I still love the taste of them. And then you sort of think you’ve got the yellow kiwifruits now ... So, where does it (the proposed concept) sit on the continuum of plastic versus natural?”

This quote indicates the differences in consumer understanding and assumptions about food system concepts and the assumed ‘unnaturalness’ of ‘man’s intervention’ in the system. If necessary, due to medical conditions she admitted to the use of pharmaceuticals, accepting the possibility of risks, however, when it came to food choice, there was concern over the fundamental changes that might occur from what she perceived as potentially synthetic ingredients. When considering the source of health benefits in diets, participants revealed their preference for consuming them directly through eating fruit and vegetables, consistent with earlier findings (Childs, 1997; Wrick, 1995). Similar to the findings of Devcich et al., (2007) who found that emphasising the “natural” aspects of a functional food additive was linked to their greater acceptance, this gave a positive reassurance to participants. Concern was not evident over the process of manufacture itself. As Maria (48) concluded:

“If it is a natural ingredient that has been added. It’s not like a chemical or a manmade thing has been put in there.”

The establishment of clinical proof through testing and scientific substantiation was not typically seen as trustworthy, and did not necessarily alleviate risk. Janice (58) saw science as being able to prove things, and make others feel safe, however, she was concerned that science was biased in being able to prove what they wanted to prove, and could not be relied upon because of small samples. Mary (62) was also sceptical of clinically proven claims because of their pervasiveness in the marketplace, commenting:

“But clinically proven, I think everybody says that, its overkill. Just a little bit. May be a different wording, I mean, you can’t put guaranteed, because nothing is ever guaranteed. So no, that wouldn’t make any difference to me, whether it was clinically proven or not.”

In contrast, for others, there was added confidence from clinically proven claims. Emma (36) saw value in independent testing, with large sample sizes and longitudinal studies. However, for Gina (55), it was not necessarily enough to counteract other requirements of greater importance:

“That would make me feel better about it. I would feel more confident about it, but I think it’s all on the taste. If I don’t like the taste you are never going to get me to eat it.”
Perceptual defence processes can also be subject to biases such as hope, where consumer’s attention are drawn away from risk-related information to make negative consequences seem less likely, and lead to the subsequent trial of new products (MacInnis & de Mello, 2005). This perhaps explains why several participants indicated they would try the proposed foods, despite initial concerns. Somewhat unexpectedly, direct personal health risks, such as the effects on the possible alteration of basic metabolic processes were found to be a surprisingly low influence on the believability decision. This can perhaps be explained by the low perceived risk of the proposed fortified foods in relation to other known or tried ‘quick fix’ weight loss strategies, which anecdotally involve potentially endangering practices. Participants in the present research narrated historical personal weight loss experiences which they recognised as very unhealthy activities including the use of appetite suppressants, crash diets, and barbiturates. This suggests that some degree of risk is acceptable in this area where there is a high personal desire for results. A reduction of perceptual defence processes to risk-related information and negative consequences has previously been attributed to the presence of hope (MacInnis & de Mello, 2005), and this would seem to explain the desire for some participants to try the foods despite initial concerns over the perceived risks.

6.5.4 Counter-Argumentation

Throughout the sense-making process there was extensive cognitive rationalisation about the perceived benefits offered by the foods, and why they might or might not work for the interviewees. This process of developing arguments and counter-arguments is regarded as a central to cognitive attitude formation in the Elaboration Likelihood Model (ELM) (Bagozzi et al., 2002; Petty & Caccioppo 1986). It serves as a means by which consumers, who are motivated, and involved, cognitively elaborate using the central processing route. Drawing upon prior knowledge and existing beliefs, this rationalising process involved a consideration of how the foods may be involved in alleviating personal issues, akin to the evaluation of product agency (Otnes et al., 2014; Johnson & Stewart, 2005). Two separate areas of counter-argumentation which ensued are outlined below.

a) Counter-argumentation – The Eating / Hunger Disconnect:

The role of hunger in the decision to eat was reflected upon in great detail in the interviews. As found previously, differentiations were made between mental hunger and physical hunger (Murray & Vickers 2009), and this was a major area of interest for several participants who
identified themselves as out of control eaters. They focussed on their tendency to experience a disconnection between eating and hunger, and for them it was ‘up in the air’ as to whether emotional eating could be counteracted with such foods. Verbatim comments which illustrate this construal are provided in Table 15.

**Table 15: Illustrative Quotations -The Eating/ Hunger Disconnect**

<table>
<thead>
<tr>
<th>Quotation</th>
<th>Source</th>
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<tbody>
<tr>
<td>“I certainly eat even when I’m not hungry, even when my hunger is satisfied, I still eat... But it doesn’t address emotional eating, I mean, does it? Does it?”</td>
<td>Rosemary 58</td>
</tr>
<tr>
<td>“I don’t know. Because sometimes I see things. And I eat them anyway. It’s nothing to do with whether I’m hungry or not. So I don’t. So I wouldn’t be 100% sure at this stage.”</td>
<td>Gina 55</td>
</tr>
<tr>
<td>“Is it that hungry feeling that makes you go and eat? I think I eat because it is the time.”</td>
<td>Cindy 34</td>
</tr>
</tbody>
</table>

Doubt centred on whether the fullness benefit would counteract personal challenges with ‘out of control’ and emotional eating. As Rita (61) debated:

“Yes. Because they will have put something in it. They will put something that will sort of blow-up the belly and send the messages to the brain. Then I would want to know what they are. But is that going to work for me or not? I don’t know. Because it’s not really about fullness. That’s the problem.”

The personal lack of control which led to overeating was attributed to unknown and even uncontrollable forces from the mind. This thinking is representative of the dualistic cultural orientation that creates a responsibility for the mind to control the body (Thompson & Hirschmann, 1995). For Rita, her control challenge was deeply seated, mysterious and long term, and would not be addressed in the short term, by the enhancement of physical fullness. In a similar way, Lydia (44), who also related incidents of uncontrolled eating, saw herself as having to deal with her mental wish to eat. She explained:

“But I think it’s up here (pointing to head) I don’t think it’s got anything to do with being hungry, with me it’s a head thing, it’s definitely a head thing. I was talking about this with someone this morning at work, she is the same. It’s a battle in my head (laughs) it’s weird.”

Kris (58), with an extensive history and knowledge of dieting strategies, saw overeating as a psychological issue, and she speculated on whether the benefit in the product concept could actually counteract that:
“It would have to affect not only your stomach, it would have to affect your mind in some way. And how does it do that? I can see something filling the tummy up and your stomach might send a signal to your brain that you’ve full. But I think the mind, after a while, can, disregard that.”

Kris (58) rationalised that the desire of the mind would be stronger than the stomach. She saw this as a potential limiting issue for the proposed foods concept, due to her perceived lack of personal agency. For her, gaining help with craving at the time of the overeating was what was needed, that is, she was looking for immediate satiation rather than an extended period of satiety. She theorised the benefit would work best if the feeling of fullness came on quicker, in her words:

“Almost sort of immediately once you’ve eaten it you felt satisfied. So that the feeling of it being yummy and there is still a bit left, and I can go and fill up and have another one. ‘No I won’t have that’ yea … So if I was full quicker, and I was full, and I thought ‘God I couldn’t fit another one in’, then good thing. Because I can’t really fit another one in but my body hasn’t had time to tell me that.”

b) Counter-argumentation: Personal Adherence

The need for adherence to weight loss activities in the longer term, and the experience of needing to maintain motivation was identified as problematic for the use of the foods in the longer term. Kris (58) thought the concept was an advance over milkshake meal supplements, but she also wondered if it would work without her own efforts.

“So I don’t know I can’t answer that. I know when I’ve gone on a diet I’m quite successful because I am motivated to start with. But then I get bored, you know, and then I lose motivation. So whether this product continued to work, just without me being involved with it, you know, mentally involved with it.”

She was also concerned that her body would get used to the new sense of fullness, and then override the ‘new’ fullness signal, meaning a loss in efficacy in the longer term. In this way, the role of the foods in question as a weight loss solution was identified by many participants as dependent on one’s own personal behaviours. Concerns were also raised about how the foods would be managed and therefore adhered to in the daily routines. The logistics of the foods and their incorporation into the daily routine, the need for self-management and complementary behaviours formed significant areas of counter-argumentation. Relevant quotations are shown in Table 16.
**Table 16: Illustrative Quotations – Counter-Arguments - Personal Adherence Issues**

“*It needs to be readily available. I don’t think that would help me actually. My bad times are when I am not organised, so I wouldn’t have the bread. My bad times are when I’m at tennis. So again, I’m not sure.*” (Cindy 34)

“*Well the other thing is what sort of variety would there be because that’s another thing, if I had to eat the same thing every day that’s gonna throw me out. Because variety is a big key in my diet. Because I am not a person that decides ‘Oh, Monday well have mince, Tuesday we’ll have steak. I think I don’t know what I’m am going to eat from one day to the next … So I would want a variety in amongst those products.*” (Gina 55)

“What about my poor husband who makes dinner if I use them he might get his nose out of joint.” (Gina 55)

Hedonic concerns over the taste and selection of foods were also the subject of counter arguing for those identifying as food hedonists, leading to positive and negative comments about the hypothetical range of food carriers. As observed by Verbecke (2006) some consumers are unwilling to compromise on taste in functional food selection. Mary (62) was concerned that they might taste like ‘health foods’ which she described as lacking in taste and texture:

“As long as it tasted the same. That’s a big thing. A lot of these health chocolates and things, they are revolting. For a sweet person they are revolting. I don’t like that carob chocolate or any of that stuff.”

Whether different types of food carriers, such as breads, yoghurts or crackers, were believable carriers varied considerably across participants, and the potential difficulties for marketers in developing and selecting appropriate food carriers was highlighted. Individualised preferences for appropriate food carriers were evident, due to tastes, and knowledge of foods which would be congruent with weight loss activities. For example, for Maria (48), the fortification of bread was seen as counterproductive because it was a ‘stodgy’ carbohydrate, which would not be used as part of weight loss activities. Therefore, she was unsure of how it would work for her. Yet, for others, bread was seen as a believable carrier, especially if it was a health bread. The need for variety in food carriers was raised to avoid boredom, and to enable ongoing consumption. Whilst there was discussion on the appeal of including such a benefit in for example, chocolate, wine, or potato chips, these were generally seen as entertaining examples. In agreement with past functional food literature, the overall indication was a need for congruence and relevance with a food carrier perceived as healthy,
and in this case naturally more filling (Ares et al., 2009; Krutulyte et al., 2011; Siro et al., 2008; Urala & Lahteenmaki, 2007). In summary, the analysis of counter-arguments suggests that participants attempted to rationalise reasons for why the foods might not be appropriate for them and expressed their uncertainty and doubts. As the next section shows, judgments of believability were therefore not forthcoming due largely to the complexity and uncertainty surrounding the assessment.

6.5.5 Reserving Believability Judgement
The final section of the sense making analysis considers the degree to which participants felt the concept was believable to them following directed probing by the researcher. Given the nature of the enquiry for an abstract concept involving complex long term behaviours it was not surprising or unexpected that circumspect and doubtful comments would arise. The following section shows the different dimensions in the ways believability responses were considered. It shows the different levels of the response, but importantly the protected and personally valued nature of the judgement.

a) Believable in Theory
Firstly, participants viewed the functional benefit of extended fullness from fortification itself as believable, in accordance with the findings of Bilman et al., (2012). Table 17 illustrates the cognitive reasoning behind this.

Table 17: Illustrative Quotations –Functional Benefit Believability

<table>
<thead>
<tr>
<th>Quotation</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I think it is believable. Because you need something that.. I mean, I think it is possible because there are some types of food. Just normal food. As I mentioned before, for me, just changing breakfast cereal. It depends on which kind of cereal you eat.”</td>
<td>Emma 36</td>
</tr>
<tr>
<td>“Oh, it’s totally believable because I mean it is in the whey products, and things like that, you know, for the milkshakey things, that make you, that fill you up.”</td>
<td>Kris 58</td>
</tr>
</tbody>
</table>

For example, having “something to blow up the belly”, or equating the foods to stomach stapling to make it physically impossible to eat, meant the enhancement of foods to provide greater fullness was viewed as “totally believable”. Existing knowledge was drawn upon to make linkages between the satiety properties of the product concept and foods that were known to offer a greater sense of fullness. Comparisons with protein bars, appetite suppressing pills as well as oats, and wholegrain pastas were forthcoming. Jude (57)
expressed her own positive experience with regulation and could see the foods as working for her:

“I know that when I eat more protein at lunchtime. I try and eat protein so that I find that I don’t get so hungry. So I always have like chicken or salmon or whatever cheese and God knows what, eggs or whatever.”

Emma (36), an electrical engineer, having taken a nutrition course in her spare time, justified how the concept might work and assist her personally, leading to a positive believability response and a desire to try. For Maria (48), however, the concept whilst believable had some negative associations in consideration of the heaviness of the foods:

“Yea... I suppose it is believable because, I suppose there are some foods that have things in them that do make you feel fuller anyway, so it is already existing to some degree.”

For Natalie (30) whilst the concept was believable, it was unacceptable. She used a metaphor to explain her concerns about the principle of food fortification with added compounds:

“Of course it’s believable! They could put, I don’t know, probably would be more effective if they put speed in bread. That would kill your appetite and that would help you lose weight, that can be believable. It’s believable but is it desirable?”

In this sense participants were conveying that they saw it as ‘conceivable’ or ‘viable’ that hunger could, in some physical way, be suppressed by food fortification for extended periods of time. However, in discussing whether this was a believable benefit for them, the women uncovered very different aspects of the judgement.

b) Believable for Self

Although the functional benefit was seen as generally believable, when it came to expressing the degree to which a personal outcome was anticipated, an unwillingness to make a firm judgment upfront was revealed. This provided insight into the protected and personally protected nature of believability from the consumer perspective. Table 18 reflects this reluctance to make a future assessment and the need to protect what is an emotional and personal response.
Table 18: Illustrative Quotations -Believable for Self

“I don’t think I would believe it until I tried it. I would be, because, I don’t think necessarily everything works the same way for everyone. So it might work for someone else, it wouldn’t work for me. It might work for me. It might not work someone else. I would have to try it first before I would believe in it as such.” (Mary 62)

“But I would probably um evaluate and make the call once I’d sort of looked at it. And you know made that decision myself. I perhaps couldn’t really say one way or the other right now.” (Leanne 54)

“Well I mean you try it. If it was going to work, how do you know until you try?” (Gina 55)

Participants were somewhat bemused at being asked about whether they believed something that they hadn’t previously tried out. The “proof will be in the pudding” suggested Rosemary (58) and Gina (55). The above examples demonstrate the dominant approach of thinking about believability responses, where participants suspend outcome expectations, until further first hand personal confirmation from oneself or an important friend / family member. They were realistic about the longer term behaviours needed and indicated the need for confirmatory evidence from their own trial. The influence of word of mouth recommendations was also viewed by participants as highly influential in making the concept more believable (Sweeney, Soutar, & Mazzarol, 2008).

Further to this the emotional power and strength of ‘having belief in’ an activity was revealed. The role of ‘believing in’ a weight loss program or activity was introduced as something that could lift oneself, by providing an added impetus to one’s own effort. For instance, Rita (61) thought if you ‘believed in’ something then it would be more likely to work for as it gave a motivating power from holding confidence and faith in a solution. In this way ‘believing in’ was a personal sense of strength that was an added resource to be drawn upon in addition to the activity itself. Rather than just ‘believing that’ a benefit would work for you, this interpretation shows the emotional need for agency in the form of a ‘faith’ or self-empowerment to transcend barriers where important motivations are driving the behaviour. As St James et al., (2011) have demonstrated in a weight loss context, the creation of a space of ‘magical thinking’ allows weight losers to sustain themselves in stressful situations where there are uncertain outcomes. Further to this, Beruchashvili et al., (2013) show how a brand, in their case, Weight Watchers, cultivates hope and faith by the use of
collective processes which originate in the religious vernacular. They show that the experience of faith helps members deal with obstacles, doubts, and set-backs and provide the right “mind-set” for weight loss pursuit. This important consumer dimension of “believing in’ an activity, as a source of personal strength, is explored further in the third study in the next chapter.

Therefore, within the present context, believability was interpreted to be an important aspect of a new concept judgement for participants. However, from a consumer perspective, believability was shown to be a personally important consequence, rather than a guiding evaluative component. It required personal confidence and confirmation before it would be contemplated and entered into. As Maria (48) explained:

“Um, yea, I would probably try it, just out of interest, to see what it does, to see if it is, so I can actually believe it, to test it if you like.”

In summary for Part 2, the interpretation of the sense making processes revealed multiple illustrations of pre-existing scepticism, appraised incompatibility, risk perceptions and counter-arguments as to why the concept of the proposed foods might not be believable as a personal weight loss option. The appraisal processes in the main resonated with those theorised as dimensions within the generalised appraisal theoretical framework. The personalised counter-arguments were shown to be closely based on immediate challenges faced and on identity associations and relevance. However, as will be revealed and discussed in the next section, an apparent inconsistency occurred between the above judgements and the indications of positive future intentions. The cognitive manner of the processing under dual process models such as the ELM suggests that the careful processing of information and the presence of counter-arguments leads to a lowered intention to try (Petty & Caccioppo 1986). In the present research, in contrast to this, the influence of underlying motivations for a positive outcome mean the decision to try appears based instead on future anticipations about a possible solution. Next, the presence of hope is interpreted to alter this traditional, expected need for cognitive consistency.

6.6 Study 2 - Findings and Discussion: Part 3 - Believability and Future Actions

The final part of the findings responds to RQ 2.3: How do the women’s believability judgements link with their future behavioural actions for the proposed foods? It considers the
differing anticipations held regarding personal intentions. In contrast to the uncertain believability responses, future behavioural intentions to buy and try the proposed foods were revealed to be straightforward. This was somewhat surprising in itself, given the abstract nature of the positioning statement which did not include concrete marketing mix elements such as packaging, pricing and branding. The appearance based motivations for wanting to lose weight frequently referred to during the conversations, and are interpreted to have stimulated a ‘wanting to believe’ in a good outcome, but at the same time these conflicted with the cognitive realisation of the need for a long term, sensible and healthy approach to weight loss activities. Despite participants open criticism of the unattainable and unrealistic media portrayals of women, the response is likely a reflection of the external pressures that still remained for the participants. This ‘wait and see’ approach, was interpreted as allowing an interest in trial without a need for personal commitment, and as will be shown, a protection against being deceived by the over promises of a weight loss solution. What was most interesting in the responses, however, was the differing levels of positivity and hope that were brought to the discussions, which are summarised below.

6.6.1 Valenced Anticipations

Echoing the quantitative findings of Study 1, and notwithstanding compatibility issues, interest in buying and trying the foods was generally indicated by most participants despite their differing individual sense making appraisals and challenges. At one extreme there was a degree of certainty as illustrated by Emma (36):

“I would try it. Absolutely, as long as they (the ingredients) are declared on the label, because maybe there are people that can be allergic to something. I mean it would be fine with me, because I trust more or less what they put on the label.”

Her risk assessment was low and she exhibited trust in the food industry. She maintained a cognitive consistency in her judgements, from her advanced nutritional health knowledge (Petty & Caccioppo, 1986). Across the remaining interviews, however, the appraisals stimulated different degrees of initial hopefulness which was reflected in the way future intentions were framed. Two fundamental dimensions for holding future intentions were identified and these are contrasted below. The first, illustrated in Table 19, is interpreted as being motivated by an emotional ‘wanting to believe’ response, where hopefulness is evoked and positive anticipatory emotions are elicited for appearance motivations. It illustrates the motivated and rationalised thinking processes proposed by Kunda (1990).
Table 19: Illustrative Quotations -Wanting to Believe

<table>
<thead>
<tr>
<th>Theme</th>
<th>Illustrative Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanting to believe</td>
<td>“Yea, I would. I’d just try it. I mean we all want to lose weight don’t we. I don’t want to get scraggy. I like clothes, it’s nice to be able to be a clothes size smaller.” (Janice 58)</td>
</tr>
<tr>
<td></td>
<td>“Oh yes. I think this would appeal because a lot of people, even myself, would love the magic thing. To lose weight easily without having to make a huge effort. By just carrying on with your everyday life without any routines, and you have just got your routine of things and you do things and you automatically you just lose weight.” (Kris 58)</td>
</tr>
<tr>
<td></td>
<td>“If it was going to make me thin, I’d pay.” (Gina 55)</td>
</tr>
</tbody>
</table>

a) Wanting to Believe

The underlying emotional presence of hope for weight loss meant participants indicated they had little to lose by trying the foods, and that they could well miss out on a possible opportunity. Whilst the activities of weight loss were seen as intrinsically reliant on self-responsibility and autonomy, it was also seen as completely reasonable that one would ‘give them a go’, and that results would then be evaluated after trial. The possibility of ‘magic bullet’ solutions arose and revealed conflicted thinking for some women. There was an underlying ‘realism’ which suggests that a healthy approach was an ideal way to go about the weight loss process. Cindy’s (34) comment encapsulated the thinking of many others:

“A quick fix really is for the birds, it’s not gonna last. The quick fix is look good in a month. And then in 2 months’ time, be in the same situation you were in the first place. So really what would be the point. I think it’s really got to be a lifestyle change. Things that you can realistically fit in with your life, that you are going to be able to maintain for ever more.”

However, this is not to say that a magic bullet was not also considered desirable and was even hoped for. As Cindy (34) generalised, “It’s a long haul, but we want a quick fix”. Behaviourally, many short term diet regimes had been tried, and there was evidence that this would continue. For example, Rosemary (58) admitted to recently searching for “rapid weight loss” sites on the internet in the hope of finding something suitable to try. Lydia, a fitness instructor who was seeing a nutritionist, knew the principles of high protein and rigid exercise and the long term process of both weight gain and weight loss. However, she also spoke about her recent purchase of Garcinia Cambogia, a widely advertised weight loss supplement which claims to curb appetite and to reduce weight. She knew that it sounded too
good to be true and kept taking it despite the advice of her nutritionist who described it as “a waste of money”. Therefore, whilst there was acknowledgement of a long term programme approach which would not be alleviated by a magic bullet, this did not stop a degree of fantasizing about the possibility of finding one. The comment below from Kris (58) illustrates the emotional desire to build hope and to “want to believe” in the product concept as solution,

“It would be fantastic if it did work. If I could eat a pita bread sandwich and think I’m so full now I don’t want to eat the rest the day.”

This process of rehearsing what it will be like to obtain an object of desire is seen as part of a self-seduction to enhance one’s emotions using imaginative elaboration (Belk, et al., 2003), and the need to sustain hopefulness has been observed previously in weight loss contexts (Beruchashvili et al., 2013; St James et al., 2011). The processing was therefore interpreted to indicate the impact of hope on behavioural intentions, where it stimulated motivated reasoning, thereby biasing the elaboration of some pieces of information for use in justifying behavioural intentions (Kunda, 1990).

b) Expecting Failure

In contrast, because of past disappointments related to emotional experiences involving guilt and regret with weight loss, for some women, their process of sense making and appraisal brought emotional elicitations of a less hopeful nature to their future actions. The second theme reflects pessimism, where although there was an interest in trying the food, this arose with doubt and little expectation of success. The interest in trial was driven more from an emotional motivation of trying “as a last resort”, and indicates the differing manifestations of hope (cf. MacInnis & de Mello, 2005). The response was not filled with positive anticipation, as illustrated in Table 20.

Table 20: Illustrative Quotations –Holding Anticipations-Expecting Failure

<table>
<thead>
<tr>
<th>Theme</th>
<th>Illustrative Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expecting failure</td>
<td>“I just feel that, that’s just another of, how many have I done before, I really. For me personally, it’s like okay, I would give it a try. I would be half-hearted at this point. It would take a lot to convince me, at this point. But I would be willing to give it a go.” (Rita 61)</td>
</tr>
<tr>
<td></td>
<td>“Yea, I just sort of think yea, I might try it very sceptically, but I certainly would be very surprised if it actually worked and was any good for you.” (Leanne 54)</td>
</tr>
</tbody>
</table>
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Rita (61), after many years of unsuccessful weight loss attempts, had a low cognitive evaluation of her own adherence, and did not hold an expectation that they would work for her. As discussed previously, the nature of the challenge for her directly impacted her judgement:

“My concern about anything like that is not the product, not the programme not the effects when I’m taking it. It’s the point when it all becomes meaningless and I yo yo to the other side. That’s the part that I am trying to avoid. happening again. I’m getting married next year and I would love to be 30 kg lighter than I am now, at least 25 to 30 kg.”

For Leanne (54), a prevailing scepticism was interpreted as being a defence to her undesired self which she was determined to accept. She had indicated previously,

“I know myself that I have a typical Kiwi figure, small top, hips two sizes bigger than the top half and God, that’s certainly not the way I like it, but what do you do? You’re stuck with it, and I think because of my um body shape, all through my life I have felt big and fat.”

The adoption of defensive pessimism is a strategy that is used when there is anticipation that an outcome is likely to be negative (MacInnis & Patrick, 2006). To reduce stress such rumination helps anticipate possible obstacles to then allow steps to be taken to avoid them. These responses demonstrate how a barrier of scepticism and negativity is erected to protect the underlying presence of the hope of an outcome against disappointment. Power is found in not believing. However, simultaneously there remains a necessity for an openness which is manifested in the behavioural decision to buy. This ‘give it a try’ response has been interpreted as arising from a fear of missing out on a possible option that may work. The Fear of Missing Out (FoMO) is a relatively new construct which has to date received attention in contexts such as social media (Hetz, Dawson, & Cullen, 2015; Przybylski, Murayama, DeHaan, & Gladwell, 2013), and alcohol drinking by college students (Riordan, Flett, Hunter, Scarf & Conner, 2015). The empirical findings of Przybylski et al., (2013) show that individuals with low levels of satisfaction regarding their life have higher levels of a fear of missing out, as do those with lower levels of general life satisfaction and general mood. They point to the FoMO being an individual difference factor associated with vulnerability. In the present context, this ‘give it a go’ response would seem to explain, especially for those who expect disappointment, a personally justifiable motivation for trying as a way of not missing out, even though the possibility of an outcome is neither expected nor believed.
The differences in the two approaches are therefore interpreted as reflecting the intensity of the presence of hope elicited following the cognitive appraisals. For those participants who focussed on a positive promotion focus, a more positively emotionally valenced hopefulness and behavioural intention was in evidence than those with a prevention/ avoidance focus. This self-regulatory difference has been demonstrated previously in experimental studies of hope, where a promotion focussed hope was differentiated from a prevention focussed hope (Poels & Dewitte, 2008). The impact of the different valence of emotions has also been found by MacInnis & Patrick (2006). They showed positive emotions were more likely to be present for promotion focused individuals in the resolution of conflicts, than those with a prevention focus, where negative emotions such as guilt and deprivation weighed more heavily.

In conclusion, Part 3 of the findings responded to the overall RQ. 2.3, how do the women’s believability judgements link with future actions for the proposed foods? The analysis suggests that the initially tentative believability judgements were expressed as a possibility and openness which would then be reinforced after behavioural actions. The emotional elicitation of hope, if it was present, arose from the uncertainty of the appraisals. For some this provided an initial openness for trying, which could be converted to firm believability. However, hope for most appeared weakly held. It appeared to be protected under negativity, scepticism, and a justified lack of confidence that the proposed foods would work.

6.7 Study 2 - Limitations

Study 2 has several limitations outside the control of the quality assurance procedures outlined previously in section 6.2.3. Firstly, the findings are limited to the 14 women who were interested in sharing their views and to the time frame in which the interviews were conducted. The findings are not representative and generalisations are not intended. Due to the purposive sampling requirement, where a hypothetical product concept was required to be understood and evaluated, the majority of participants were from above average income and education levels. The procedure of snowballing sampling also introduced possible limitations in terms of the lack of diversity of the participants. However, this limitation was reduced by recruitment using posters in sports club in different Auckland suburbs, and a new pool of participants was introduced from this enlistment. As was shown, a variety of experiences
around food and weight loss activities was brought to the study, and many different personal interpretations of the product concept and sense making aspects resulted.

Secondly, the flexible and dynamic in-depth interviewing process itself has limitations in terms of participant and researcher bias. Because participants were discussing and elaborating upon their personal experiences in ways that may have been new to them, or that they were sensitive about, there is the possibility of verbalisation using socially acceptable answers (Weiss, 1995). To minimise these biases, the researcher attempted to build rapport with the participants and provide a safe and non-judgemental environment. The abstract nature of the product concept itself required participants to understand an unfamiliar and somewhat complex product concept from reading a description. Usual marketing elements such as pricing and packaging were not available. The demand characteristics of the interviewing situation involving a concept evaluation may lead to greater elaboration and justification than might occur in a typical marketplace situation (Machin & Fitzsimons, 2005). Participants may invent ‘logical’ reasons that make sense at the time, which are easy to verbalise. They may feel the requirement to respond according to desirable social and cultural norms and conventions (Köster & Mojet, 2007). Because of this, scepticism and counter arguing may have been heightened because of the presence of the researcher, which could have generated a more guarded response. However, the on-line survey, Study 1, which was undertaken anonymously and presumably in private, without the presence of an interviewer, still indicated scepticism was occurring and was widespread.

Thirdly, for the researcher, interviewing skills such as experience, sensitivity, probing, reframing and adaptability are critical to the quality of the interview data (Wallendorf & Belk, 1989). Where possible the researcher strived to be as uninvolved as possible, only providing additional information to answer questions and to establish that there was understanding. However, this was not uniform across the interviews and varied according to the conversational nature of each interview, and the issues under discussion.

Fourthly, because of the abstract and general nature of the positioning concept statement, participants made their own interpretations and understandings of it. There were many possible unknowns about the satiety benefit, and how hunger control might operate. Where possible the interviewer clarified points in the discussion, but it is possible that confusion and
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misconceptions took place, given differences revealed in the understanding of food industry systems and practices.

Finally, analysis procedures which explore themes can lead to over-structuring (Savin-Baden & Major, 2013). The emphasis on generalising the process stages means there is the danger of a separation from the data and a loss of the original meaning. To minimise these limitations, systematic procedures were followed, including the keeping of interviewer notes, checklists and thematic maps. It is encouraging to note similar and consistent patterns of findings across the three studies regarding the appraisal of the product concept in different research methods.

6.8 Chapter Summary

The findings of Study 2 provided rich description into the complexity and at times ambiguity of believability judgement from the women’s perspectives. Firstly, the interviews revealed useful underlying themes from the lived experiences of food consumption and weight loss activities for helping explain the subsequent individualised judgements. The analysis then revealed how participants made sense of the concept and why they were uncertain about the potential efficacy of the proposed benefit. Fundamental compatibility issues were revealed. Overall, the believability response was pensive and uncertain and this was shown to involve embedded scepticism and a desire to resist being persuaded. Contributing to the uncertainty were perceptions of risk associated with the suspected processing involved in their manufacture. Consequently, to deal with this uncertainty and complexity, a wait and see approach was adopted. The presence of emotionally driven motivations arising primarily from weight/ body image concerns was interpreted to drive the desire to ‘give them a go’ just in case they proved to be a useful solution. Overall, in this particular context, the analysis showed the multi-faceted and personally nuanced ways of thinking about believability judgements.

The next chapter, concerns the third empirical study, which uses the repertory grid technique (RGT), (Kelly, 1955), to explore the personal constructions of participants to further understand what believability means to participants.
Chapter Seven: STUDY 3

The first two studies revealed the personally nuanced and protected way in which believability judgements were made in the present context. Openness to trying the proposed foods was evident for many, but this did not appear to be driven by a belief or confidence that they would necessarily work. There was a consensus that believability would be confirmed once there had been some proof of performance for oneself and/or a close reference group member. The interviews in Study 2 also gave insight into the diverse weight loss activities and highly personalised and intermittent approaches that are adopted, with the long term, lifestyle approaches regarded as the most believable. However, this was not to say that other activities would not also be tried, and that certain activities may be individually perceived as more believable than others. Therefore, a third study was conducted to explore the individual generation of meaning behind believability judgements for weight loss activities. To do this, interviews were conducted with 10 New Zealand women who were interested, but not necessarily currently attempting weight loss, using the Repertory Grid Technique (RGT) (Kelly, 1955). This enabled understanding of how the concept of the weight management foods would compare and contrast with existing weight loss/management methods and activities. This chapter firstly backgrounds the repertory grid technique (RGT) and its theoretical underpinnings. The chapter then outlines the details of the data collection, rep grid interviewing and analysis procedures. It then presents the detailed findings of the study, followed by a discussion, and summary of the chapter.

7.1 Study 3 - Aim and Research Questions

The aim of Study 3 was to gain further theoretical insight into believability judgements by exploring the personal constructs used to obtain meaning for believable weight loss activities. In doing this, the study also aimed to further understand the way in which the proposed concept was construed in relation to these constructs. It added to further understanding and insight into the overall research questions, RQ1 and RQ3.

Two research questions were developed as follows to guide the study.

RQ 3.1 How do women construe whether particular weight loss activities are believable for them?

RQ 3.2 How is the concept of the proposed foods construed by participants in relation to their other weight management activities?
7.1.1 Background to the Method- The Repertory Grid Technique (RGT)

The RGT was developed by Kelly (1955) as a research method to provide a direct operationalisation of Personal Construct Theory. Personal Construct Theory (Kelly, 1955) is a broad overarching constructivist theory or philosophy, as introduced in Chapter 4. To recap, Personal Construct Theory (PCT) makes the assumption that people experience their own reality and develop their own unique construct systems based on their experiences and their understanding of the consequences of their behaviours. This is influential upon how people give meaning to life events. Kelly (1955) reasoned that to understand an individual, it was necessary to explore their personal theories, and their constructions of meaning. He maintained that a person is guided by an entire network of meaning, and that these construct systems exist in personal hierarchies, with the so-called ‘core constructs’ being central to the identity of an individual. Individuals were theorised to have different ways of seeing the same item or experience because of their unique construal.

The research technique was based on Kelly’s key notion that constructs operate in bi-polar categories which define a characteristic of an element as perceived by an individual. That is, people tend to differentiate items by using contrasting anchors such as good/bad, like/dislike. Essentially, by asking participants to think about the ways in which things are alike and different, this process allows them to elucidate a meaningful personal construct, or a dimension of meaning (Fransella, Bell & Bannister, 2004; Kelly, 1955). In the current research study, the elements are weight management activities or methods which are generated from discussions with the participants. These elements, including the proposed foods concept, were then construed by the participants to derive their own personal constructs.

Originally developed as a clinical psychotherapeutic application, the RGT has evolved for educational, managerial and consumer research applications (Baxter, Goffin & Szwejczewski, 2014; Marsden & Littler 2000b; Van Kleef, Van trijp & Luning, 2005b). It allows the individual participant to freely elicit their personal way of determining what is important to them, without the imposition of a researcher’s framework. The exercise is best regarded as a mutual process of construction rather than a cognitive mapping exercise (Fransella et al., 2004). Since 1955, numerous reviews and re developments of Kelly’s RGT have occurred (e.g., Fransella, et al., 2004). The RGT has gained currency in consumer research applications, being adopted to quantitatively examine consumer perceptions of
products and services in means-end chain analysis (Gutman, 1982), and to help recognize unmet needs in new product development research applications (Baxter et al., 2014).

This method was seen as a suitable and complementary approach to the previous two studies and the theoretical perspective of the research. It allowed further integration of results with the previous qualitative and quantifiable findings. It has been defined as a constructivist approach because it aims to explore a person’s idiosyncratic processes as they construe that world, rather than attempting to classify ideas into imposed theoretically derived categories. The RGT offers several important characteristics that differentiate it from other interpretative methods. Whereas unstructured or semi-structured in-depth interviews offer a free ranging conversation, the RGT involves a structuring task which allows the participant to focus their thoughts in a way that directs them to discovering important personal constructs. It serves as a unique and flexible method of enquiry allowing the researcher to mix elicitation procedures and qualitative and quantitative analysis and interpretation. By looking at the relationships between the elements and the constructs, the data produced a greater depth and breadth to the understanding of how participants make sense of their believability appraisals.

The RGT has had some previous application in weight loss studies, for example, comparing elicited constructs of self-perception between obese and non-obese participants (Castiglioni, Pepe, Gandino & Veronese, 2013), and food beliefs for successful and unsuccessful dieters (Hill, 1997). However, the use of the technique as a means of comparing and contrasting weight loss elements is a new application, and the present research can therefore make a methodological contribution by adapting the RGT in a consumer behaviour context. Further details of the specific RGT method applied in this study are provided below. These procedures were based on the recommendations of Fransella et al., (2004) and Bell (2003).
7.2 Study 3 - Method

7.2.1 Data collection

Four preliminary pilot interviews were conducted prior to data collection to allow researcher familiarisation with the repertory grid procedure and the construct elicitation process. An interview plan was developed to assist the researcher in conducting the grid procedure (see Appendix H: Study 3- Preliminary Interviewer Guide). The pilot interviews were audio-taped, and the ensuing grids were evaluated by the research supervisors. Final adjustments were made to fully ensure the construct elicitation process was focussed on believability judgement. Ethics approval was obtained from the University of Auckland Human Ethics Committee (UAHEC) with an amendment to the existing approval for Study 2 prior to the data collection process.

Interviews were conducted with a sample of 10 New Zealand women between November 2014 and March 2015, in Auckland, New Zealand. The criterion for selection was broadened from the previous two studies. Weight loss activities are known to have many manifestations and be inconsistent and periodic in nature, as evidenced in Study 2. Therefore the selection criterion was changed to also include women who were not currently attempting weight loss. Instead, they could be looking to manage their current weight, taking a break or just generally interested in the topic.

i) Recruitment Procedures

Participants were selected using purposive sampling procedures to obtain a pre-defined sample (Charmaz, 2011). The task of reviewing and discussing the concept statement and completing the grid required a degree of abstract thinking, and the sample was limited to women who were interested and able to share their views in this way. As will be shown, however, a wide variety of weight related experiences were brought to the study. Initially the participants were recruited from acquaintances of the researcher and primary supervisor. Snowballing sampling techniques were then used to recruit further potential candidates from acquaintances of the existing participants (Bernard, 2000). Recruitment was also conducted using an announcement on the Facebook page of a University of Auckland colleague with a wide range of women contacts. The findings are therefore not intended to be generalizable. The ethical requirements set out by the UAHEC, necessitated that participants not be approached by the researcher; instead they were invited by a third party, usually another
participant or the supervisor. Participants received a $50 thank you payment, in the form of a shopping mall voucher, at the time of the interview. This payment was funded by a University of Auckland PhD Research Grant. Once ten interviews had been completed and the grids were reviewed, data collection ceased. The sample size was deemed as adequate for the exploratory study,

\textit{ii) The participants}

The women participants were aged between 30 and 58 years and resided in Auckland city suburbs. Table 21 shows their profiles. To some degree, similar personal and weight profiles were collected as in Study 2, but once again, the participants brought unique experiences of weight loss to the interviews, demonstrated by the differing weight management elements and constructs that were respectively generated and elicited across the rep grid interviews. The different criteria for the inclusion in the survey meant that some participants were not necessarily currently trying to lose weight, in contrast to the previous two studies. Their weight loss related status is summarised in Table 21.
Table 21: Research Participant Profiles- Study 3

<table>
<thead>
<tr>
<th>Age</th>
<th>Occupation</th>
<th>*Weight Loss Status</th>
<th>No. of Children</th>
<th>Ancestry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kim</td>
<td>30 PhD Student</td>
<td>Not actively attempting weight loss</td>
<td>0</td>
<td>NZ European</td>
</tr>
<tr>
<td>Collette</td>
<td>50 Lecturer</td>
<td>Periodically attempts large losses using Jenny Craig- not currently trying</td>
<td>2</td>
<td>NZ European</td>
</tr>
<tr>
<td>Jocelyn</td>
<td>52 Nurse</td>
<td>Not actively attempting weight loss</td>
<td>2</td>
<td>NZ European</td>
</tr>
<tr>
<td>Cathy</td>
<td>58 Public Servant</td>
<td>Attempting Large Loss</td>
<td>2</td>
<td>NZ European</td>
</tr>
<tr>
<td>Maggie</td>
<td>48 Retail Assistant (Garden Shop)</td>
<td>Monitors for changes and makes adjustments</td>
<td>2</td>
<td>NZ European</td>
</tr>
<tr>
<td>Linda</td>
<td>50 Consultant</td>
<td>Attempting to lose 10kg</td>
<td>3</td>
<td>South African</td>
</tr>
<tr>
<td>Ngaire</td>
<td>49 Event Manager</td>
<td>Attempting to lose 5kg</td>
<td>3</td>
<td>English</td>
</tr>
<tr>
<td>Sharon</td>
<td>58 Primary Teacher</td>
<td>Watches weight if gains &gt; 2kg</td>
<td>3</td>
<td>NZ European</td>
</tr>
<tr>
<td>Stella</td>
<td>42 Office Manager(Navy)</td>
<td>Attempting to lose 10kg</td>
<td>0</td>
<td>English</td>
</tr>
<tr>
<td>Jacinda</td>
<td>35 Office worker (Navy)</td>
<td>In maintenance phase after large (25kg)weight loss</td>
<td>2</td>
<td>NZ European</td>
</tr>
</tbody>
</table>

* As discussed in interview
iii) Interview procedures

The interviews were viewed as a privileged inquiry and the researcher took care to follow respectful and ethical procedures in view of the personal nature of the weight loss topic (Baker & Gentry, 2006). Prior to the interview, participants received emails including a participant information sheet and consent form. This preliminary information included a background about the rep grid procedures to be undertaken in the interviews. The consent form was signed prior to the commencement of each interview. The interviews took place in either the researchers, or participant’s home or workplace. They lasted between 45-65 minutes. All interviews were recorded using an audio recorder for later reference by the interviewer. Participants were advised that although the interview was recorded for the purposes of further researcher support in the analysis of the grids, it was not to be transcribed. The audio files were subsequently stored on a hard drive at the University of Auckland for safe keeping.

The researcher began the interview by introducing the study. Repertory grid procedures were explained and participants were assured that further explanation would be provided if needed as the procedure unfolded. The blank A4 grid sheet was presented at this point (see Figure 14, Example of the Repertory Grid). Participants were informed that the weight loss elements would firstly form the columns across the top of the grid and that the rows would be developed in the second stage of the interview.

Figure 14: Example of the Repertory Grid
7.2.2 Repertory Grid Procedures

i) Element Selection

The first stage involved developing a set, or ‘repertory’, of elements of weight management activities and options. As a rule, to produce meaningful responses, elements should be personally experienced by the participant and they should be as homogeneous, representative, and as unambiguous as possible (Bell, Vince, & Costigan, 2002; Fransella et al., 2004; Wright & Lam, 2002). Although elements in repertory grid studies can be pre-established by the researcher, in view of the individualised nature of weight management activities, it was seen as appropriate and beneficial to the research that these be generated by, and be specific to, each participant. The interview began with a discussion about different weight management activities and regimes that participants had previously used and/or had good awareness. Participants were encouraged to include commonplace activities used when considering weight management, that is, the elements did not have to be specific diets or regimes. This discussion typically lasted 15 minutes. Participants developed elements which ranged from commercial weight loss programmes, such as “Jenny Craig Foods”, to personally developed solutions, such as “Having less wine/beer”. The researcher recorded the elements onto cards to build up an individual set of elements and entered the elements into the top line of the rep grid sheet. The product concept with the ‘fuller for longer’ benefit was then introduced on a card and verbally discussed with the participant and included as the final element. The researcher attempted to establish a relevant food that was regularly consumed as a possible carrier of the satiety benefit food to make it relevant in each case. Generally participants were able to generate at least seven elements from their own background knowledge. To assist participants with their element elicitation, the researcher also prompted responses by showing participants pre-existing cards which contained the names of commonly used weight loss elements. Where possible participants had direct experience with their elements, however in some cases, there was only a familiarity from a friend’s or family member’s experience. This is recognised as a potential limitation of the study, but given that the product concept was also hypothetical and that participants had no experience with its use, this was considered acceptable.
ii) Construct Elicitation

The next stage involved the process of eliciting personal constructs from the elements. This process can be varied according to the research objectives, from very structured sequential practices to open and subjective methods (Fransella et al., 2004). In the present study, to generate important components of what was seen as a believable approach to weight management, personally relevant constructs were elicited based on each participant’s own consideration of the elements, using the following steps:

- According to Kelly’s original procedure (Kelly, 1955), a random set of three cards, a triad, was chosen by the researcher at random from the pool of elements and shown to the participant.
- The participant was asked to look at the triad elements and to think about how two of the element cards belonged together and were different from the third. The participant was asked to group the cards according to how believable they were as weight loss options that would work personally.
- The participant was then asked why they had ordered the set in this way, that is, why two elements were seen as similar, and therefore different, to the third. The discussion for this comparison and contrasting process was used to develop a unique meaning based word or phrase for differentiating the elements, that is, a pole of a personal construct. This was established as the emergent pole of a construct.
- The participant was then asked to think about what would be a contrasting word or phrase to the ‘emergent pole’ to form the ‘opposite pole’ for the construct. The researcher then established which pole was the ‘preferred pole’. Once this was done the elicited construct was entered into the rows of the grid, so that the preferred pole was on the right hand side of the grid and the least preferred was on the left. This alignment enabled easier subsequent completion of the grid in the following element comparison, which was the third and final stage in the process.
- The researcher noted the emergent pole, and the participant was then asked if there were other ways in which the elements were seen to be alike or different. Probing took place using laddering techniques (Neimeyer, Anderson & Stockton, 2001) to attempt to uncover more superordinate constructs of a higher abstraction by probing using questions such as “In what way is that important to you?”
- The full elicitation process was then repeated with other triads until the participant was unable to come up with new constructs. The researcher ensured that the product
concept was involved across the majority of triads. In this process it was important that the participant’s own words were inserted, rather than the researcher interpretations. This ensures interviewer bias is minimised and allows discovery of how the individual is thinking about the elements in question (Baxter et al., 2014).

iii) Element Comparison
Once the constructs had been entered into the grid, the final step of the rep grid procedure took place, involving the numerical rating of each element on each of their constructs. This rating process provided a way for participants to position their weight loss elements in a relative sense, between the extremes on each construct. This gives insight into how each element (in particular the product concept) performed on each construct pair and allows quantitative analysis to take place. A 7 point scale was used where if an element perceived to be very closely aligned with the preferred pole was rated 7, and one perceived as aligned very closely to the opposite pole, received a rating of 1, with any score in between. Any comments of interest were noted by the researcher as they completed their ratings. If participants felt they could not answer a particular rating, they were asked to insert a cross. It must be noted that the rating figures do not have an inherent meaning in themselves, but simply provide a way for the researcher to obtain insight into the overall structure of their construct system (Stewart & Stewart, 1981). Once the grid was completed, participants were thanked, and received the $50 thank you payment. As part of the snowballing procedures, participants were asked to recommend friends or relatives who could take part in the study. Once again this proved to be a promising source of new participants of different ages. After the completion of ten interviews, it was determined that a sufficient amount of data had been obtained to answer the aims of the study and the data collection concluded.

7.2.3 Data Analysis
The RGT typically produces a large amount of individual information, including the constructs, numerical data from the rep grid itself, as well as the discussion that took place as the grid was compiled regarding element selection. Taylor (1990) sees the repertory grid as primarily a dialogue between the researcher, the participant and the data, and suggests the use of quantitative analysis should only be used as a means of focussing the research ideas, rather than being the main tool of the research. This position was adopted in the current research. Where numerical statistics are presented, they are regarded as indications by the participants to give guidance and support the interpretation of the qualitative patterns found in the data.
The data were treated as constructions of the participants in line with the constructivist assumptions of the overall research. Practices recommended for consumer research applications of rep grids were explored in this process (Baxter et al., 2014; Caputi, Viney, Walker, & Crittenden, 2011; Faccio, Castiglioni & Bell, 2012).

The researcher was mindful of the original intentions behind the development of the technique by Kelly (1955), and the importance of retaining the meaning of the original constructs elicited from participants (Marsden & Littler, 2000a). In marketing applications, care is needed where RGT interviews are combined at the group level and the analysis can be removed from the original participant meaning (Rogers & Ryals, 2007). The researcher therefore conducted analyses that remained close to the data, attempting to find qualitative patterns without attributing a positivist or reductionist interpretation to the data. In interpreting the data, precedence was given to the qualitative analysis, with the quantitative data serving as a support in certain instances. Because of the limited sample size, findings are exploratory and are not intended to suggest significance or generalisation outside the sample of participants. The analysis procedures are summarised below in Table 22, with their relevant research question.

**Table 22: Summary of Repertory Grid Analysis Procedures**

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Quantitative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Within Grid</strong></td>
<td><strong>Correlations between constructs (RQ3.1) and elements</strong></td>
</tr>
<tr>
<td>● Analysis of element and construct elicitations (RQ 3.1)</td>
<td>● Construct Ordination Score (RQ3.2)</td>
</tr>
<tr>
<td>● Analysis of foods concept elicitations (RQ 3.2)</td>
<td>● Comparison of elements at the endpoints (7 point ratings)(RQ3.2)</td>
</tr>
<tr>
<td>● Thematic analysis of elicited constructs across participants (RQ3.1)</td>
<td>● Principal Components Analysis (RQ3.2)</td>
</tr>
<tr>
<td><strong>Across Grid</strong></td>
<td></td>
</tr>
</tbody>
</table>

The constructs were firstly individually interpreted for meaning and themed both visually and in accordance with the audio recordings. Focussed coding of the overall construct meaning for the elicited pole and opposite used a process of hermeneutic cycling, between the audio recordings, rep grids and researcher notes (Lincoln & Guba, 1985). The themed constructs
from all the grids were then thematically analysed using coding following the guidelines of the constant comparative method (Spiggle, 1994). The raw data from the completed hand written repertory grids were also entered into Idiogrid v4.2 software for supplementary quantitative analysis as a possible support for the findings. This involved the correlation of constructs, and the procedure of calculating the ordination score for each participant (Landfield & Cannell, 1988). The ordination score is calculated from the number of different values used for rating the elements on the construct, and the differences between the maximum and minimum scale values used for the construct. If a construct has a high ordination score this indicates that the participant uses it as a more discerning construct in relation to other constructs in the grid (Caputi et al., 2011). This is assumed to make the construct more meaningful to participants. However, as the researcher noted, this is also dependent on the elements being rated and their relevance to the construct in question. A principal components analysis (with-in grid) was used to provide visual emphasis to the way the elements were individually construed in certain cases. The further creation of an overall element comparison across the grids was not conducted due to the emphasis on the individual meaning making for the research.

7.2.4 Quality Assurance – Trustworthiness

To ensure the findings of Study 3 represent the perspectives and views of the participants, qualitative research strategies were utilised to reduce researcher bias and enhance the quality and soundness of the research (Lincoln & Guba, 1985; Wallendorf & Belk, 1989). They were as follows:

Credibility: The repertory grids were developed between the participant and the researcher, and the elements and constructs were personally developed using the participants own wordings rather than a pre-imposed structure. However the idiographic nature of the repertory grid data means that its meaningfulness is personal and known only by the participant. Credibility was enhanced because participants generated both the elements and the constructs. This meant a greater familiarity and relevance for participants than in repertory grid studies where these are provided by the researcher. To ensure transparency, the original hand written grids were stored. The coding and thematic interpretations made by the researcher were in conjunction with the principal supervisor and these interactions continued throughout the analysis. Transparency with the supervisory team in terms of the procedures and access to the audio recordings and resulting rep grids was maintained. Further
quantitative checks were undertaken for all grids. The inter-individual correlations between constructs showed that most participants had significant levels of consistency in their constructs with the exception of two participants. On examination in conjunction with the interview recording, this lack of correlation was explained by the particular constructs elicited and indicates a complexity of thinking.

Transferability: For the present study, the extent to which the findings are applicable to other contexts is restricted to other emotionally influenced settings, such as personal health and wellness activities, where there is complexity and uncertainty in important outcomes. As noted for Study 2, appearance related contexts may share some overlap in the findings.

Dependability: The nature of the repertory grid technique meant that an established procedure was conducted using the same steps for each participant. Whilst the initial semi-structured process of element elicitation differed between interviews, the remaining grid procedures were uniformly and consistently approached. The researcher was mindful of not dominating the elicitation process, but noted that this did occur at times in the joint establishment of opposing poles.

Conformability: The recognition of the subjective nature of the interpretation and presentation of repertory grid findings has been made, and this affects the extent to which another researcher would arrive at the same interpretations for the data (Miles & Huberman, 1994). Vast options exist for detailed analysis within and across the grids. The researcher attempted to prioritise the participants’ views by the use of qualitative and interpretive analysis of the grid findings in conjunction with several illustrative quotations from the interviews that took place. Because the researcher had previously conducted and analysed the in-depth interviews of Study 2, where there were close similarities and overlaps in content, it was important to recognise and minimise potential biases that may have affected the researcher perspective.
7.3 Study 3 – Structure of Findings

To recap, Study 3 aimed to firstly, gain insight into the personal constructs women use to construct believability judgements for their weight loss activities, and secondly, to compare the way in which the “fuller for longer” food concept was perceived in relation to these constructs. The findings are presented in two parts, with sub sections as follows:

Part 1: RQ 3.1 How do women construe whether particular weight loss activities are believable for them?

- 7.4.1 Elicitations of Constructs (Within Grids)
- 7.4.2 Discussion of Personal Construct Themes (Across Grids)

Part 2: RQ 3.2 How is the concept of the proposed foods construed by participants in relation to their other weight management activities?

- 7.5.1 Element Ratings (Within Grids)
- 7.5.2 Food Concept Elicitations (Within Grids)
- 7.5.3 Least Favourable Concept Ratings (Within Grids)
- 7.5.4 Favourable Concept Ratings (Within Grids)

(The Repertory Grids for all participants are reproduced in Appendix I: Study 3 Repertory Grid Raw Data). An example of a completed grid for one participant is shown below in Figure 15.
Figure 15: Example of a Repertory Grid with Participant Ratings on Elicited Constructs

<table>
<thead>
<tr>
<th>Original Grid (Cathy)</th>
<th>Weight Watchers</th>
<th>Jenny Craig</th>
<th>Reductil</th>
<th>Nutritionist</th>
<th>Appetite Suppressant</th>
<th>More Exercise</th>
<th>More Water</th>
<th>Sure Slim</th>
<th>Count Calories</th>
<th>Satiety Foods Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>1.00# 2.00 7.00 1.00 7.00 1.00 7.00 7.00 7.00 1.00 7.00 *Product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsustainable</td>
<td>5.00 2.00 1.00 7.00 2.00 3.00 6.00 9.00 2.00 6.00 *Sustainable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative experience</td>
<td>4.00 2.00 2.00 7.00 3.00 3.00 6.00 4.00 3.00 4.00 *Prev.pos experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don't understand the rationale/science</td>
<td>7.00 6.00 2.00 7.00 6.00 7.00 7.00 6.00 7.00 7.00 *Makes sense</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too hard/ Difficult</td>
<td>4.00 3.00 2.00 6.00 1.00 2.00 7.00 2.00 3.00 7.00 *Do-able</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extra effort outside daily schedule</td>
<td>6.00 4.00 5.00 6.00 7.00 2.00 7.00 4.00 2.00 7.00 *Lifestyle/ everyday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expensive/Not good value</td>
<td>7.00 1.00 2.00 7.00 3.00 1.00 7.00 2.00 6.00 7.00 *Not costly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Sense of failure</td>
<td>3.00 2.00 2.00 6.00 2.00 1.00 6.00 2.00 6.00 4.00 Sense of achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slow results</td>
<td>4.00 6.00 7.00 4.00 7.00 2.00 3.00 3.00 3.00 3.50 *Quick results</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unwilling</td>
<td>2.00 1.00 1.00 6.00 6.00 2.00 7.00 2.00 2.00 6.00 *Willing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OPPOSITE POLE

* = Emergent pole

# The participant’s numerical rating of each element based on its perceived alignment with their preferred pole (7=strongly aligned with preferred pole to 1=strongly unaligned with preferred pole)
7.4 Study 3 – Findings Part 1- Personal Construct Elicitation

The first part of the findings reveals the process of construct elicitation from derived weight loss elements on the basis of whether they were believable options for them. Elicitations made specifically in triads involving the proposed product concept, are discussed in the second section of the findings, section 7.5.

7.4.1 Elicitation of Constructs (Within-grid)

The visual analysis of the grids showed the individualised way meaning was construed. The initial analysis showed 76 individual construct pairs, were generated across the interviews. The majority of construct elicitations were preferred pole elicitations (74%), and no participant contributed more than 44 % less preferred poles, indicating the positive nature of the process. At the beginning of the interview, to initiate the construct elicitation process, simply derived constructs were included in the grid as a warm up procedure. The construct elicitation was more abstractedly articulated and interpreted as superordinate, as the interviews progressed. This was due to both the interviewer’s use of probing and laddering, and the participants’ personal interest in understanding why they were perceiving differences between the elements. Participants reported that they found the overall process of thinking about their weight related activities in this way interesting, stimulating, and at times challenging.

Table 23 summarises the elicited constructs for each participant in order of their elicitation and according to whether they were made as preferred or opposite pole elicitations. Also shown is the average correlation between constructs for each participant based on the later element ratings. This is a measure of the participant’s cognitive complexity in eliciting the constructs (Faccio et al., 2012). If the mean correlation is large, all constructs are highly correlated and related to the elements in a similar way versus those for whom the constructs are more distinct, indicating construal in a more complex manner. This was useful in helping to understand whether each participant construed her environment in a simple or more complex manner, and allowed interpretation as to the reasons for this.
Table 23: Elicited Constructs and Construct Correlation within Grid

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathy</td>
<td>58</td>
<td>Activity- Product*</td>
<td>Side Effects /Risky-Safe</td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unsustainable -Sustainable</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negative experience-Previous Experience positive</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Don’t understand rationale/science-Makes Sense</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Too Hard, Difficult-Do-able, Easier</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Have to make an effort –Lifestyle everyday life</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expensive, Not good value- Not costly</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slow results-Quick results</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unwilling-Willing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collette</td>
<td>50</td>
<td>No way of knowing- Proven track record</td>
<td>Unknown, not relevant - Familiar</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hardwork - Easier, simpler, magic</td>
<td>Interfering with body function- Natural concept, not affect body function</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sadness, not worth it - Enjoyment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feel like a slob - Feel strong &amp; healthy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jocelyn</td>
<td>52</td>
<td>DK know what is in it/Altered - Not altered, messed with</td>
<td>Unknown / Risky -Familiar</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Functional - Social fabric/ pleasure</td>
<td>Marketed/ branded -My philosophy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not possible - Possible for you</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not satisfying - Self Fulfilling/put your own self into it</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jacinda</td>
<td>35</td>
<td>Not knowing- Food Awareness</td>
<td>Too Restrictive -Variety of Food</td>
<td>0.95</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group Impersonal- Personal Support-one on one</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not in own control- Own sense of Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unhealthy bad choices- Good for me</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kim</td>
<td>30</td>
<td>Less in charge - More in charge</td>
<td>Targeted at weight loss in itself- Healthy, doing it for me</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Defined by Others - Solo Initiative</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strict - Flexible</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not sustainable - Sensible, Holistic</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deprivation, no nutrition - Nutrition</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brings out craving- Doesn't bring out cravings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Elicited Construct in bold*
### Table 23: (Contd) Elicited Construct Pairs and Correlation Scores

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Linda</td>
<td>50</td>
<td>Focus on exercise - <strong>Focus on good food</strong>&lt;br&gt;Doesn't show understanding – <strong>More understanding of body principles</strong>&lt;br&gt;Doesn't make sense to you - <strong>Makes sense, research-based about hunger</strong></td>
<td>Doesn't address underlying problems-&lt;br&gt;Addresses underlying problems&lt;br&gt;Lacking trust, diet industry- <strong>Trusted</strong>&lt;br&gt;Unhealthy/ Processed- <strong>Healthy</strong>&lt;br&gt;Doesn't deal with cravings - <strong>Deals with craving, satisfying</strong></td>
<td>0.42</td>
</tr>
<tr>
<td>Maggie</td>
<td>48</td>
<td>Open to abuse, bad foods- <strong>Pure, natural, eliminates bad</strong>&lt;br&gt;Grey areas, temptations- <strong>Black &amp; White</strong>&lt;br&gt;One size fits all- <strong>Personalised to you, individual</strong>&lt;br&gt;Makes you feel guilty- <strong>Makes you more content</strong>&lt;br&gt;Abusing your body- <strong>Doing the right thing for body and mind</strong></td>
<td>Rigid and Controlling- <strong>Love of Freedom</strong>&lt;br&gt;Why Pay- <strong>Own Effort</strong>&lt;br&gt;Lazy – <strong>Own Willpower</strong></td>
<td>0.70</td>
</tr>
<tr>
<td>Ngaire</td>
<td>48</td>
<td>Support/ need a prop- <strong>Confidence /Discipline</strong>&lt;br.Focus on weight alone- <strong>Enjoyment, health, fun</strong>&lt;br&gt;Fake, hidden sugar- <strong>Natural, wholesome</strong>&lt;br&gt;Not how I choose to be- <strong>One item in lifestyle</strong>&lt;br&gt;Go against principles- <strong>Works with eating plan</strong>&lt;br&gt;Not Creative- <strong>Being creative</strong></td>
<td><strong>Unnatural practice, outside normal practice</strong>- Normal, sensible eating&lt;br&gt;Elite, elect, religious pure- <strong>More open &amp; relaxed</strong>&lt;br&gt;Denial as a pleasure- <strong>Eating as pleasure</strong></td>
<td>0.93</td>
</tr>
<tr>
<td>Sharon</td>
<td>58</td>
<td>Restrictive Strict- <strong>Freedom of choice</strong>&lt;br&gt;Little room for personal choice- <strong>Individual decision making</strong>&lt;br&gt;Not sustainable- <strong>Sustainable</strong>&lt;br&gt;Denying food groups- <strong>Eat a range of food groups</strong>&lt;br&gt;Not balanced- <strong>Beliefs about eating healthy</strong>&lt;br&gt;Faddish - <strong>Human, ordinary</strong></td>
<td>Unnatural practice, outside normal practice- <strong>Normal, sensible eating</strong>&lt;br&gt;Elite, elect, religious pure- <strong>More open &amp; relaxed</strong>&lt;br&gt;Denial as a pleasure- <strong>Eating as pleasure</strong></td>
<td>0.87</td>
</tr>
<tr>
<td>Stella</td>
<td>42</td>
<td>Less effective- <strong>More effective, see results</strong>&lt;br&gt;Not as good - <strong>Better for your health</strong>&lt;br&gt;No assistance- <strong>People/ Assistance/Back up</strong>&lt;br&gt;Seems unrealistic - <strong>Turned on a light</strong>&lt;br&gt;Not empowered- <strong>Confidence, own power stamina</strong></td>
<td>Makes you think about food- <strong>Mind off food</strong>&lt;br&gt;Didn’t feel capable- <strong>Makes me feel capable</strong>&lt;br&gt;Emotions up and down- <strong>Takes emotion out of it</strong></td>
<td>0.91</td>
</tr>
</tbody>
</table>

*Elicited Construct in bold*
Table 23 reveals the elicited constructs to be made in personal and diverse ways with a considerable range in construct content and complexity. For all but two of the participants, strong positive correlations were found for the constructs based on how the elements were later rated. For the two exceptions, Linda (50) and Cathy (58), one construct in each of the grids was negatively correlated with all the others and this which impacted their correlation. These participants had a tendency to develop constructs that were more varied, indicating a greater complexity in their views. Whilst the process of construction showed considerable personal variation, the existence of themes in the constructions was evident and these are discussed below as a way of interpreting and reporting patterns of meaning within the data.

7.4.2 Discussion of Personal Construct Themes (Across Grids)

Five themes were identified from the coding and interpretation of the personal constructs by the researcher. They are shown in Table 24 and then discussed below in turn, along with specific participant comments that took place in the interviews. The themes, as interpreted by the researcher, represent the progression of meaning making that took place within the interviews, from concerns firstly for personal health and wellbeing to those centred on personal self-enhancement and the development of competence.
Table 24: Key Themes from Personal Constructs and Examples

<table>
<thead>
<tr>
<th>Themes</th>
<th>Construct Examples- Preferred Pole (Opposite Pole)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesomeness</td>
<td>Normal sensible eating (Unnatural practices, outside normal)</td>
</tr>
<tr>
<td></td>
<td>Natural Concept not affect body (Interferes with body function)</td>
</tr>
<tr>
<td></td>
<td>Doing the right thing for your body (Abusing your body)</td>
</tr>
<tr>
<td></td>
<td>Pure, natural, eliminates bad (Open to abuse, bad foods)</td>
</tr>
<tr>
<td></td>
<td>Nutrition (Deprivation, no nutrition)</td>
</tr>
<tr>
<td>Personal Philosophical Alignment</td>
<td>My Philosophy (Marketed, Branded)</td>
</tr>
<tr>
<td></td>
<td>Makes sense (Don’t understand the rationale/science)</td>
</tr>
<tr>
<td></td>
<td>Works with eating plan (Goes against principles)</td>
</tr>
<tr>
<td></td>
<td>Addresses underlying problems (Doesn’t address underlying problems)</td>
</tr>
<tr>
<td></td>
<td>Proven track record/ (No way of knowing)</td>
</tr>
<tr>
<td>Desire for Autonomy</td>
<td>Solo initiative (Defined by others)</td>
</tr>
<tr>
<td></td>
<td>Confidence, discipline (Support, needed prop)</td>
</tr>
<tr>
<td></td>
<td>Own sense of control (Not in own control)</td>
</tr>
<tr>
<td></td>
<td>Confidence, own power (Not empowered)</td>
</tr>
<tr>
<td></td>
<td>Self-Fulfilling-Can put yourself into it (Not satisfying)</td>
</tr>
<tr>
<td>Desire for External Agency</td>
<td>People, assistance, back up (No assistance)</td>
</tr>
<tr>
<td></td>
<td>Easier, simpler magic (Hard work)</td>
</tr>
<tr>
<td></td>
<td>Doable (Too hard, difficult)</td>
</tr>
<tr>
<td></td>
<td>Sense of achievement (Sense of failure)</td>
</tr>
<tr>
<td></td>
<td>Willing (Unwilling)</td>
</tr>
<tr>
<td>Life Enjoyment/Inspiration</td>
<td>Healthy/ doing it for me (Targeted at weight loss in itself)</td>
</tr>
<tr>
<td></td>
<td>Eating as pleasure (Denial as pleasure)</td>
</tr>
<tr>
<td></td>
<td>Enjoyment (Sadness, not worth it)</td>
</tr>
<tr>
<td></td>
<td>Makes you more content (makes you feel guilty)</td>
</tr>
<tr>
<td></td>
<td>Social Fabric, Pleasure (Functional)</td>
</tr>
<tr>
<td></td>
<td>Lifestyle, everyday life (Have to make extra effort)</td>
</tr>
<tr>
<td></td>
<td>Being creative (Not being creative)</td>
</tr>
<tr>
<td></td>
<td>Human Ordinary (Faddish)</td>
</tr>
</tbody>
</table>

a) Wholesomeness

Having a healthy and nutritional approach that works with one’s own body was a dominant way of differentiating between what were, and were not, personally believable elements. The need for healthy food choices, such as having a focus on fruit and vegetables and looking after one’s body as naturally as possible was expressed for many, but not all, women. This echoes the findings of both previous studies in the current research, where a sensible lifestyle approach was valued as the gold standard and seen as a highly credible and trusted option.
Jocelyn (52) based her activities around her extensive knowledge of nutrition. Elements were more believable for her if they were familiar, safe, and not messed with. She made the distinction between processed foods and chemically changed foods, noting that humans had always processed and refined foods. She sought a holistic way of eating which minimised the inclusion of unfamiliar and risky foods and ingredients, similar to those of the ‘purists’ identified in the in-depth discussions of Study 2. The trends towards ‘naturally sourced’ and ‘wholefood’ consumption are significant ones for consumers in western societies (Mellentin, 2012). The substantial intake of fruit and vegetables form the basis of current public policy, government and medical recommendations. The participants meaning making showed they had internalised this notion, and there were few differences in perception as to what constitutes natural, healthy foods. Construing was also undertaken regarding the elimination of foods seen as ‘bad’ for weight loss such as carbohydrates and those including sugar. In this way, women in the present research were connecting their beliefs about the integral role of fruit and vegetables, with the most authentic way to go about the weight loss process (Askegaard et al., 2014; Beverland, & Farrelly, 2010).

b) Personal Philosophical Alignment:
The requirement for a weight loss activity to be aligned with one’s inner logic and personal philosophy also emerged as a theme across the elicited constructs. As revealed in Study 2, the need to find alignment with one’s personal beliefs and values was re-iterated using the grid technique. Elements were construed to be believable if they made sense with one’s own internal knowledge base. This supports previous research in other contexts, of the role of knowledge as an antecedent of credibility evaluation (Brucks, 1985; Rieh & Danielson, 2008; Wathen & Burkell, 2001).

Personal meaning of what was believable for Linda (50) was construed as being enhanced by external specialist knowledge of weight loss. She would believe a program if it was based on modern, advanced research evidence, showing how the program would work with the body to address its underlying problems. She believed in the ‘Tim Noakes Diet’, a somewhat controversial low carb/ high fat eating programme popularised by a South African sports scientist. It is interesting to note that Linda was from South Africa herself. She wanted to build up her own knowledge and trust and construed that, knowing something was driven by the diet industry, would lead to it not being seen as believable for her. Maggie (48) found the ‘Blood Type Diet’ to be highly believable, because she understood the science behind it. She
recounted that an individual’s blood type affects food digestion due to evolutionary differences, such as being carnivorous or not. She elicited a preferred construct of “personalised to you, individualised”, with an opposite, and least preferred pole of “one size fits all.” As will be further discussed in the next section she rated the proposed foods concept poorly, indicating her perception of it as a mass produced solution. For these women, personal philosophies were rationally based on personal lay theories, logic, and evidence. It was also based on what had been seen as ‘familiar’ and ‘proven’, therefore again showing the need for personal confirmation of believability judgements identified in Study 2.

Across the participants, less preferred poles were elicited as those based on poor rationales, or perceived as not well understood by oneself, or too standardised, marketed or branded. Interestingly on probing at the end of the interviews, some existing options, such as the Blood Type Diet, and the Tim Noakes Diet were discussed as providing ‘strongly believable solutions’, and participants were evangelical about their ideas (Beruchasvili et al., 2013). This demonstrates their ability to ‘believe in’ these particular elements. The elicited constructs therefore conveyed that one’s own personal input and thinking was crucial, rather than a marketed ‘solution’ that was being imposed as a standardised way of thinking that took away one’s own sense of initiative. As Higgins, Grand & Shah (1999), have shown, a sense of self-regulation can be better attained in a more positive and knowledgeable way, due to a synergy with one’s fundamental personal approach and understanding.

c) Desire for Autonomy:

Related to the above interpretation, was an overarching desire for a sense of one’s own autonomy. The research identified women who believed weight loss was their own personal responsibility, and their own actions would influence their weight management. This encapsulated constructs associated with indicating a desire to feel that they were in charge of the process. Predominantly, they wanted to be reliant on their own input and develop their own discipline and willpower, indicating their awareness of the centrality of the self in the overall process, and the holding of a capability, and feeling of faith in themselves. For example, Ngaire (49) construed weight loss activities as more believable if they gave her freedom and a sense of confidence in herself. She did not see them as working for her if she had to pay for an item, when she could alternatively be making her own effort. She construed that using her own willpower was more believable to her, as opposed to being lazy and making use of props. Similarly, for others a reliance on one’s personal resources and self-
sufficiency was important, as manifested in constructs such as, ‘a solo initiative’ and ‘putting oneself into it’ to gain self-improvement. Rather than being in a ‘no-win’ situation, these women had constructed a way of achieving progress towards their goals by attempting to build their own autonomy. This resonates strongly with previous literature. Individuals who feel autonomous about their goals will benefit, especially if the goal reflects an individual’s interests and values, rather than social expectations (Koestner, 2008). Under self-determination theory, individuals are shown to vary greatly according to this fundamental dichotomy and those who indicate competence, autonomy and relatedness are thought to provide enhanced motivation (Deci & Ryan, 1985; Ryan & Deci, 2000).

Gaining a sense of individual responsibility and self-governance is also congruent with previously discussed interdisciplinary literature concerning the role of self-control, self-regulation, self-efficacy, and personal agency specifically in weight loss (Bagozzi & Lee, 1999; Bandura 1991; Baumeister 2002). Overall, the elicited responses regarding the desire for personal autonomy again showed the personal assessment of responsibility and control, and their complex role in deriving believability judgements. The process was also in support of the wider Appraisal Theory dimension of agency, which posits that individuals cognitively appraise agency and personal responsibility (Lazarus 1991, Smith & Ellsworth, 1985). Appraisals of agency have been associated with emotions such as pride when one is perceived to be under control, and shame for being out of control (Johnson & Stewart, 2005). For these participants, their own sense of autonomy was seen as essential.

d) Desire for External Agency

In direct contrast to this, were the personal elicitations of women who found activities to be believable for them if they were able to gain empowerment from the activities or elements. Stella (42) had recently been to a hypnotherapist to assist her to lose weight. She had recognised that achieving progress towards her personal goal was limited by her own lack of self-regulation. She indicated that she strongly believed this series of consultations would work for her because it gave her an empowerment to control herself. She saw it as important that she gain power to control her cravings, so that she could feel she had her own sense of autonomy. She wanted the assistance and back-up to come from others, as a means of gaining mastery or control, and thereby her own sense of agency (Otnes et al., 2014). Because of her personal identification and challenges as an emotional eater, she would believe a product or activity would work for her if it took the emotions out of the process, and was able to make
her stop thinking about food. Strategies which enhance empowerment and feelings of control are thought to have a positive influence on behaviour relating to goals (Otnes, et al., 2014), and include goal-directed agency, where the consumption of a product/service plays a key role in helping an individual achieve an outcome. These women were more likely to welcome the assistance of an external item to play an agentic role to allow them freedom from the pressure of exerting their own limited personal agency resources. In other words, there was a need for help with control, but in a way which allowed the individual to feel empowered and able to gain personal control.

Cathy (58), who had a long history of weight loss challenges, was also seeking empowerment and because of the use of science, was able to judge that she believed the proposed foods would work from her, and had a positive inclination to try them. It was important for her to not “feel a sense of failure” in her efforts, and the help of a product would help with this sense of achievement. These women corresponded with those in Study 2, in terms of the nature of their challenges faced, and their recognition of their issues with emotional eating and cravings. Typically these participants wanted to deal with their own lack of control, but do it in a way that made them feel empowered. For them conflict had been experienced between their desire for freedom and indulgence, and the socially driven need to show constraint (Belk, et al., 2003). Importantly, it was noted that these participants were bringing idealised methods to their elicitations about what ‘might be believable’ in the future and were interpreted to be making elicitations about what they hoped would work for them. They were seeking activities that could be maintained in a “do-able” and easier fashion, so that they could then gain some additional empowerment, even if these had not been previously proven or confirmed. That is, they were looking for a product to make them feel more in charge, and ‘wanting to believe in’ an agency that could provide this empowerment.

e) Life Enjoyment/Inspiration
The final identified theme revealed elements perceived as personally believable because they fitted in with the social fabric of one’s life and provided a sense of contentment. Being able to obtain a sense of pleasure and gratification from weight loss activities was construed as a positive pole elicitation for several women. This was contrasted against opposite elicitations of a sense of guilt and denial. Rather than viewing weight loss as an end in itself, a greater, more holistic and positive way of thinking about weight loss was revealed. For example, Kim (30) who identified herself as a food purist, took a holistic approach to her health, and
exhibited her association a defined personal health script (Kristensen et al., 2013). An overall discourse of ‘healthism’ has emerged over recent decades as an overriding way of thinking, where health has become a pre-occupation by which to achieve greater happiness and wellbeing (Kristensen et al., 2013). She focussed on personal nutrition and saw weight loss as a ‘by-product’ of doing something that was “awesome” for her health, and not an end in itself. She valued flexibility as a natural way of gaining weight loss, and wanted to be in tune with her body. Kim was in a same-sex relationship and was contemplating having a baby in the near future with her partner. Because she was likely to be the birth parent, and the pregnancy would involve a fertility procedure with a donor, she wanted to be as healthy as possible to give her body the best chance of becoming pregnant. Her constructions centred on establishing a flexible and natural approach, so she could be fully in charge of her overall physical and mental wellbeing. However, interestingly, although, personal meaning was clearly attached to this approach, in the later part of the interview, Kim commented on the pressure she felt as a young woman to obtain “a yoga shaped body”. This points again to the underlying and continual existence of appearance-related motivations, within this overall health and wellbeing motivation (Kwan, 2009).

For Jocelyn (52), being too focussed on weight loss was not going to work for her. For example, she saw Nutri-life food supplement drinks as too functional and outside the realms of a realistic and pleasurable way of life. It was important for her that her activities were part of the “social fabric of her life”, and this meant eating healthy, but tasty food. In a similar way, Ngaire (48) felt that if she gained a sense of “being creative”, this would enable her activities to be able to be maintained and would thus, work better for her.

Weight loss specific products were perceived as detracting from the human way of eating and the need to gain some greater sense of intrinsic and authentic value from the activities themselves was expressed. This resonates with the findings of Holbrook (1999) where value is self-oriented and experiential. Wanting to feel inspired by the process, and to gain greater competence and make more positive meaningful changes was seen as believable, because it related to one’s overall higher order needs for overall well-being and personal value (Higgins et al., 1999).
7.5 Study 3 – Findings Part 2: Construal of the Satiety Food Concept

The second part of the findings responds to R.Q 3.2 and reveals how participants construed the proposed foods concept in relation to the other elements. Firstly, it quantitatively shows how the concept compared with other elements based on the numerical ratings, enabling insight into a participant’s preferred elements. Secondly, it discusses the different ways in which the specific personal elicitations for the product concept were made. For participants who scored the product concept either most favourably or least favourably in the rep grid ratings, the researcher used the interview recordings to make interpretations about the reasons for these responses. In this way, the repertory grid ratings were combined with qualitative information from the recorded discussions to generate richer interpretations.

7.5.1. Element Ratings (Within Grids)

The findings revealed diversity between participants in their element ratings on their perceived proximity to each pole of the constructs on a 7point scale. Table 25 shows the top and lowest rated elements for each participant, along with their average foods concept rating, and ranking positon. The higher the mean score, the greater the participant sees the element as aligned with the preferred pole, and thus less associated with the least preferred pole. The full range of elements derived in the interviews can be found in the grid raw data reproductions in Appendix I.

Table 25: Element Ratings and Foods Concept Rankings (Within Grid)

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Top Rating Element (Mean Rating)</th>
<th>Lowest Rating Element (Mean Rating)</th>
<th>Foods Concept Mean Rating</th>
<th>Food Concept Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathy</td>
<td>58</td>
<td>Foods Concept (5.86)</td>
<td>Reductil (2.91)</td>
<td>5.86</td>
<td>1st</td>
</tr>
<tr>
<td>Sharon</td>
<td>58</td>
<td>Personalised Programme (7.00)</td>
<td>Bread Diet (1.22)</td>
<td>6.78</td>
<td>2nd</td>
</tr>
<tr>
<td>Jacinda</td>
<td>35</td>
<td>Food Diary (7.0)</td>
<td>Jenny Craig (1.0)</td>
<td>6.75</td>
<td>2nd =</td>
</tr>
<tr>
<td>Linda</td>
<td>50</td>
<td>Tim Noakes Diet (5.87)</td>
<td>Weight Watchers (2.89)</td>
<td>4.33</td>
<td>3rd =</td>
</tr>
<tr>
<td>Kim</td>
<td>30</td>
<td>More Fruit &amp; Veg (6.88)</td>
<td>Coffee and Cigarettes (1.63)</td>
<td>4.00</td>
<td>4th</td>
</tr>
<tr>
<td>Stella</td>
<td>42</td>
<td>Hypnotherapy (6.75)</td>
<td>Soup Diet (1.25)</td>
<td>5.13</td>
<td>5th</td>
</tr>
<tr>
<td>Jocelyn</td>
<td>52</td>
<td>Less Processed (6.67)</td>
<td>Weight Watchers/Counting Cals (3.00)</td>
<td>4.33</td>
<td>5th</td>
</tr>
</tbody>
</table>
Overall, the food concept rated moderately in relation to the other weight loss regimes and options. However, Table 25 points again to the marked differences in these judgements despite the small number of participants. As can be seen, three participants rated the foods concept relatively highly in relation to their other activities, whilst two were in direct contrast to this. The following section looks to explain these diversities, firstly comparing and contrasting the construct elicitation process.

7.5.2 Foods Concept Elicitation (Within Grid)

In the process of construct elicitation, all participants made elicitations from at least 3 triads which included the foods concept. These gave rise to elicitations that were subsequently designated as the preferred and least preferred poles. Examples are shown in Table 26.

Table 26: Illustrations of Elicitations for Foods Concept

<table>
<thead>
<tr>
<th>Least Preferred Pole Elicitations</th>
<th>Preferred Pole Elicitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown/ Risky</td>
<td>Do-able, easier</td>
</tr>
<tr>
<td>Has been altered</td>
<td>Own Sense of Control</td>
</tr>
<tr>
<td>Interferes with my body function</td>
<td>People/ Assistance Back up</td>
</tr>
<tr>
<td>Unhealthy, processed</td>
<td>Turned on a light for me</td>
</tr>
<tr>
<td>No idea, no way of knowing</td>
<td>Confidence in own power, stamina</td>
</tr>
<tr>
<td>Marketed /Branded</td>
<td>Human, ordinary</td>
</tr>
<tr>
<td>Targeted at weight loss (in and of itself)</td>
<td>Lifestyle, everyday life</td>
</tr>
<tr>
<td>Doesn’t address underlying issues</td>
<td>Can eat a range of food groups</td>
</tr>
<tr>
<td>Not relevant to me</td>
<td></td>
</tr>
<tr>
<td>Not individualised</td>
<td></td>
</tr>
<tr>
<td>Doesn’t fit lifestyle</td>
<td></td>
</tr>
</tbody>
</table>

Concerns over the possible risks associated with food fortification were prevalent, echoing those revealed in the Study 2 face-to-face interviews. For example, Jocelyn (52) construed that the proposed foods would have unknown risks, due to having something done to them. This way of providing a health benefit was not seen as natural and did not fit with more overall and holistic philosophies for weight loss as a part of lifestyle activities. Kim (30) was
concerned that the fortification of the foods would ‘fool’ her body signals, and not give her the nutrition she needed. This would go against her overall wellbeing. Whilst she could relate the benefits to friends who had told her their experiences of never being able to feel full, she preferred to use her knowledge of nutrition to eat healthy foods that would not stimulate that “extra hungry feeling.” Least preferred pole elicitations for constructs such as ‘interferes with my body function’ showed the awareness of the possible risks associated with ‘altering’ a food product was again central to doubt about foods with this benefit. Those making favourable elicitations predominantly construed the way in which the “fuller for longer” benefit would provide assistance in achieving a greater sense of one’s own control. Additionally, it was seen as favourable that a range of foods was available which would fit with daily eating and culinary activities. These constructions are discussed below in more detail for those participants with more extreme constructions in section 7.5.3. and 7.5.4. The ordination scores for each construct pair are displayed in Table 27. These quantifiably indicate which constructs were more meaningful to the participants (Landfield & Cannell, 1988). As can be seen, the scores confirm the qualitative findings, and show the way in which the foods concept was viewed as aligning with the theoretically more meaningful constructs.

Table 27: Constructs with Highest Ordination Scores and Concept Ratings

<table>
<thead>
<tr>
<th>Participant</th>
<th>Constructs with Highest Ordination Scores</th>
<th>Ordination Score</th>
<th>Concept Rating on that construct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathy</td>
<td>Do-able</td>
<td>36.00</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Sustainable</td>
<td>36.00</td>
<td></td>
</tr>
<tr>
<td>Jacinda</td>
<td>Own sense of control</td>
<td>30.00</td>
<td>7</td>
</tr>
<tr>
<td>Sharon</td>
<td>Freedom of choice</td>
<td>36.00</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Individual decision making</td>
<td>36.00</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Eating as pleasure</td>
<td>36.00</td>
<td>6</td>
</tr>
<tr>
<td>Linda</td>
<td>Modern/new</td>
<td>36.00</td>
<td>7</td>
</tr>
<tr>
<td>Kim</td>
<td>Variety of Food</td>
<td>42.00</td>
<td>5</td>
</tr>
<tr>
<td>Stella</td>
<td>Feel capable</td>
<td>36.00</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Outside assistance/Back up</td>
<td>36.00</td>
<td>5</td>
</tr>
<tr>
<td>Jocelyn</td>
<td>Familiar</td>
<td>30.00</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>My philosophy</td>
<td>30.00</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Possible for you</td>
<td>30.00</td>
<td>5</td>
</tr>
<tr>
<td>Ngaire</td>
<td>Own willpower, discipline</td>
<td>30.00</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Freedom</td>
<td>30.00</td>
<td>5</td>
</tr>
<tr>
<td>Collette</td>
<td>Familiar</td>
<td>30.00</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Natural, not affect body function</td>
<td>30.00</td>
<td>4</td>
</tr>
<tr>
<td>Maggie</td>
<td>Black &amp; White</td>
<td>30.00</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Personalised to you, individual</td>
<td>30.00</td>
<td>1</td>
</tr>
</tbody>
</table>
7.5.3 Least Favourable Concept Ratings

For two participants the proposed foods concept rated relatively poorly against the other activities. Collette (50) related she continually had a large amount of weight to lose. She discussed her hedonistic values and enjoyment and pleasure of food and wine. She commented that small people thought differently about food than her, and identified herself as an emotional eater. She attributed her body size to a longstanding thyroid problem, and discussed her need to find acceptance of her size. This process was however, counterbalanced by her ‘stupid’ husband’s remarks that she needed to lose more kilos. Collette revealed a similar yo-yo pattern of dieting to those identified in the Study 2 interviews. Dieting for short periods of time was interspersed with longer periods of indulgence. She discussed her tendency to eat what she liked for long periods of around 15 months. She then set about the concentrated process of losing weight which involved going on Jenny Craig and exercising heavily in the gym for 2 hours a day. Collette was a strong believer in the ‘total control’ offered by Jenny Craig when she was in a period of attempting weight loss. When comparing the triad of elements of ‘The Proposed Foods Concept’, ‘Taking Laxatives’, and ‘Jenny Craig Foods’, she saw the first two elements as different from the third because they interfered with a body function, whereas Jenny Craig foods did not. Her concerns were for the unknown properties of foods that could control hunger. In contrast, Jenny Craig Foods were proven by personal, confirmed knowledge to give her the control and discipline she needed. Her constructions demonstrated again that believability resulted from a confirmatory experience. However, she also admitted a hope for a magic bullet, and would “give them (the foods in the concept) a go” if they became “world renowned”, “tried and true”, and endorsed by “Oprah Winfrey”, but this was seen as very unlikely. She saw her own weight issues as stemming from a love of food, and the concept of enhancing fullness was therefore seen as irrelevant to her. She construed that a believable option for her would be one that made her feel strong and healthy, whereas the opposite pole to this would be one that made her feel like a slob. Her negative rating of the proposed foods, as being aligned with this least preferred pole, is interpreted as an alignment of the foods with an out-group to which she does not want to belong (Tajfel & Turner, 1979).

Figure 16 provides a graphical illustration of Collette’s constructs in a principal components analysis. It highlights the relative weakness of the proposed foods (CONCEPT) on her preferred personal constructs. It is located away from Jenny Craig Foods, which she construed as a tried and tested activity that would make her more content.
Maggie (48) saw value in eating little and often, and held a distinct philosophy about how weight loss occurred. She intimated that the body needed to be kept nourished with ‘good’ foods. It was important to avoid going into a low deficit state, where the body would start eating muscle rather than fat. This deprivation of the body would then be counterproductive to weight loss. She had high knowledge of nutrition and was a strong advocate of the “Blood Type Diet”, which resonated with her because of its personalisation towards the physiological needs of the body. She constructed that she wanted an approach that was ‘Black and White” without grey areas that could tease her and lead her to unwanted temptations. She understood that achieving a sense of wellbeing, required “doing the right thing for your body and mind”. Because of this rationale, she gave low ratings for the proposed concept, which stemmed from her concerns about the physical reaction of her body ‘to feeling fuller, when it wasn’t’. The lack of personalisation of the proposed foods was made clear with her construal that the foods were too standardised, being perceived as a “one size fits all” approach.

7.5.4 Favourable Concept Ratings
In direct contrast, three of the ten participants, rated the concept well and aligned it with their positive construct poles. Cathy (58) spoke of her long history of weight issues, and adherence to many diets and weight loss activities. Her challenge of being overweight for most of her adult life was reminiscent of the journey of Rita (61) from Study 2, and the common
motivation for both was the reduction of perceived stigma (Granberg, 2011). Cathy had been prescribed Reductil®, a medication used for the management of weight loss. Subsequently withdrawn from the market due to serious side effects, it claimed to work on the brain to help patients feel full and consequently reduce their food intake. In the process of her construct elicitation she commented:

“Well, if I am brutally honest, I would say I am looking for the magic bullet, so I would be looking for some, one of these product things. But, the common sense part of me says that the more sustainable one likely to lead to the better outcome, is the increased exercise.”

She wanted a solution that was ‘do-able’ and easy for her to keep to. In this way it would be sustainable for her. Importantly, her elicitations did not concern constructions for risk or health considerations, and perhaps demonstrated motivated biases towards her achievement focus on a solution using external means (Kunda, 1990). In the elicitation process, superordinate constructs emerged that showed elements were not believable to her if they gave her a “sense of failure”. In this way she was interpreted as wanting to have a solution that she could ‘believe in’ and have ‘faith in’. Cathy wanted additional assistance to help overtake her weaknesses to overconsume, and looked to draw from technology to help guide her actions. The product agency benefit of seeking a transcendence to rise above impediments has been identified (Otnes et al., 2014), and in this case, the agency benefit was not only to empower and transcend, but to also provide a sense of magic and ‘faith’ to keep oneself going. This finding again resonates with St James et al., (2011), where weight loss seeking participants strove to find their own sense of chimerical agency, to keep a sense of the impossible alive, as a way of dealing with the long and relentless weight loss. Figure 17 depicts a principal components analysis to illustrate the way in which she construed the the proposed foods (CONCEPT) away from previous failures such as Reductil® and Jenny Craig.
Sharon (58) although not attempting to lose more than 2kgs, felt her weight and appearance had always been very important to her. She had a good knowledge of a wide variety of different methods, and saw the concept of the proposed foods as highly acceptable to her because they would allow her to still have personal choice in what she ate, in comparison to other previous regimes she had had previous direct experience with. She construed the concept as remaining aligned with ordinary, human eating principles as compared to faddish type diets such as the Bread Diet, which she perceived as involving ‘denial as a sense of pleasure”, or martyrdom. For Jacinda (35), who was in a phase of weight management after recently losing 25 kilograms, the emphasis was on maintaining her current regime of sensible food choices. She had made significant dietary changes and was focussed on not regressing to past habits. She was fixated on her current proven activities, commenting that the maintaining stage of weight loss was almost harder than the weight loss process itself. Having had previous familiarity and/or success with an activity also contributed to building a sense of believability, which supports the notion from Study 2, that believability is viewed as a consequential judgement, to be established after personal experience. Although her constructions were considerably simpler than the other participants, overall she could see the foods concept as being a good possible back-up to her current efforts if they began to fail her in the longer term.
7.6 Study 3 – Overall Discussion of Findings

The findings of Study 3 showed the multiple ways in which women came to an understanding of which weight loss activities would be more believable for them, and in doing so contributed to further understanding of what believability means to consumers in this context. Rather than viewing believability as an evaluation of the truthfulness of marketing claims (e.g., Beltramini, 1988), or related to the credibility of a brand, the study demonstrated contrasting ways of thinking about believable weight loss activities and their position within participant’s overall health and wellness strategies.

Overall, for most participants, the desire for a holistic, wellbeing approach to their activities was demonstrated. Predominantly, as expected, weight loss activities that are congruent with healthy-eating principles were construed as being the most believable personal options. Insight into the need for congruence with weight loss philosophies which can enhance higher order personal wellbeing goals, consolidated the central themes identified in Study 2 and those indicated in Study 1.

One of the most productive findings from Study 3, centred on discrepancies regarding the way in which personal control over the weight loss process was meaningfully constructed by participants. The development of the personal constructs via the repertory grids highlighted the central role of empowerment in the process, and resonated with findings regarding the WLOC (Holt et al., 2001). Again this was manifested differently across the interviews, and was interpreted as predominantly explaining the polarisation in the ratings that was revealed. At one extreme personal responsibility was seen as desirable. Drawing strength from one’s own independent effort was seen as valuable and empowering to some women, and was associated with enhanced self-discipline and autonomy (Koestener, 2008). In contrast, other women sought the support and added product agency benefits of empowerment to give them a source of power which they felt they had been lacking (Otnes et al., 2014). However, importantly, it was observed that the constructions of these women appeared to be made upon what might be gained, indicating the tendency to confound hope with what was thought to be a believable future option. In this way, the constructions were centred on a hopefulness of attaining something from an easier solution that could be believed in, that would give them personal transcendence. Cathy’s (58) quotation perhaps best illustrates this point, she
reasoned: “I think it is because it is being developed with science behind it, then, I do believe it would work. I mean one is always hopeful, but because it is being developed with a scientific background, I would believe it”. The complex issue of personal control and empowerment, and how it was obtained was further revealed with marked contrasts demonstrated between those who sought ‘total control’ for short periods of time, and those who favoured their own sustained sense of control due to the need for personal responsibility in their weight loss activities. This gives further depth of understanding to the WLOC stream of research, for which further research is warranted for understanding the response to functional foods, as outlined in section 9.2.2.

The elicited constructs overall, therefore, capture different and expanded aspects of the personal meaning of believability judgements for consumers in this context. The findings reinforced that believability judgements, first and foremost, for many women, related to their personal wellbeing. It also was shown to require a need for confirmation, and a familiarity with an activity. The ability to inspire participants in a positive way was recognised as important for sustaining their progress and adherence to an activity in the longer term.

7.7 Study 3 - Limitations

Limitations for the study are inevitable and are discussed below regarding sampling issues, the Repertory Grid Technique in general and its specific usage in the present research. The findings are limited to the sample of 10 women who were purposively recruited, and represent their views at the time of the interviews. Given the dynamic nature of weight loss experiences and activities, these views may change with time. The findings are not representative and generalisations are not intended. A possible limitation is the lack of diversity of the participants. This occurred due to the selection of participants with above average education levels. As with Study 2, a hypothetical product concept was introduced, and further to this, the RGT procedure requires an ability to think abstractedly. Where possible the procedure of snowballing sampling was also used to increase the recruitment pool, as well as the enlistment of women from a colleague’s Facebook page.

Variables that may influence a participants’ judgment to develop meaningful constructs are their degree of familiarity with the elements. For example, the weight loss elements used in the present study were methods that had been used, or with which the participant was to some
extent familiar. However, in some cases participants did not have direct experience with them. Whilst the interviewer ensured that the participant had a level of awareness, and that the discussion was able to take place, this was a limitation. As noted above, the product concept was also hypothetical, and for the purposes of the research this limitation was deemed to be acceptable.

One of the advantages of the RGT is its flexibility and ability to provide data which can be analysed in multiple ways. However this can also be a limitation. Researcher bias can be introduced in terms of what data is presented, and the different emphasis and interpretations made. As noted previously, in line with the overall assumptions of the thesis, the findings were interpreted using a qualitative approach and the emphasis was given to the within grid constructions over any other quantitative or combine grid analysis. Researcher bias is an acknowledged issue with in-depth interviewing techniques (Weiss, 1995) and in the interviews there is the opportunity for over involvement, which the researcher was mindful of. The constructs were viewed as an interpreted sample of those which could possibly be elicited and are not intended to be a complete and full picture.

7.8 Chapter Summary

Chapter 7 concerned the third and final empirical study, Study 3. The chapter began by introducing why it was important to enquire into the personal constructs for believable weight loss activities, and how the concept of the proposed foods are construed in relation to these. Background on the repertory grid technique (RGT), Kelly (1955), was provided, along with the details of the method and interviewing procedures with 10 New Zealand women. The findings of Study 3 broadened understanding of the way believability judgements were constructed for weight loss elements in general. Themes of wholesomeness, philosophical alignment, agency, and life enjoyment, in weight loss, were identified from the personal construct elicitation. The ratings for the concept foods again revealed polarisation, replicating the findings revealed in the first two studies. Overall, the interpretative power of the rep grid procedure enabled greater understanding of what believability means to consumers in their general weight loss approaches and activities.
Chapter Eight: DISCUSSION

The purpose of this chapter is to discuss the main findings for the thesis in accordance with relevant theory. The research took an exploratory approach to integrate theories and concepts from a variety of research conversations and these are now combined in a discussion covering both theoretically expected and unexpected results. To recap, the research was motivated by an identified knowledge gap for consumer-centric understanding of consumer believability judgements, and this was addressed within the context of functional weight management foods. The mixed methods methodology enabled some convergence in findings in a context distinguished by idiosyncratic consumer perspectives, experiences, and motivations. In discussing the results, it is again emphasized that the findings were interpreted to reflect the viewpoints of the women who participated, and shared their personal insights, contributing valuably to the research. The overall framework for the research is reproduced in Figure 18.

Figure 18: Overview of the Research
The discussion chapter is organised into seven sections, as follows. Firstly, a brief summary description of the response is provided, and the way in which the benefit was cognitively construed is overviewed. The next two sections consider the conflicting biases of scepticism, and the emotional influence of hope, which are both interpreted to influence the judgement. The remaining three sections discuss the three important dimensions which were interpreted to meaningfully constitute believability for participants. The chapter concludes with a summary.

8.1 Believe it or Not?

8.1.1 The Uncertain Response

Satiety enhancing foods are under development as a potentially important means to assist consumers with weight loss, but there remain many questions regarding the interpretation and understanding of them (Hetherington et al., 2013; Van Kleef et al., 2012). Research into believability has not previously been conducted for a functional food exemplar. Across the three studies, the believability judgement for the concept was revealed to be tentative and uncertain on average. In the on-line survey, Study 1, a high central tendency was evident, with two thirds of participants indicating uncertainty or a mild tendency to be positive on the ‘believability for self’ and ‘overall believability’ measures. However marked contrasts in the judgements also existed. These ranged from dis-believability, where 10% of participants indicated they did not believe the concept would work for them, to a positive response, where 22% signalled the top two boxes to indicate that they strongly believed they would work for them in their weight loss endeavours. In the two qualitative studies, this polarised response was again reflected. Some indication of the reasons for this diversity was provided by the individual difference analysis in Study 1. As will be further discussed, those more likely to indicate higher believability judgements, were women who attached greater importance to their weight goal, perceived they had lower control, and held a positive attitude to functional foods. A major characteristic of the response was that of the co-existing presence of scepticism, with 74% of participants indicating that the concept was “too good to be true.” However, despite this rather tentative believability response and finding of scepticism, a positive interest in trying the foods was indicated by 82% of the sample.
8.1.2 Cognitive Appraisals

The cognitive rationalisations for the functional benefit centred on considerations of whether reduced hunger might result in lowered food consumption. As found previously, participants made distinctions between mental and physical hunger, and reasoned that reducing hunger does not necessarily lead to less eating (Murray & Vickers, 2009). Whilst it was believable that foods could indeed be fortified to result in greater physical fullness, this was not necessarily seen to ensure less food consumption, and consequently weight loss. Particularly for those challenged with the desire to eat whilst not hungry, there was confusion and doubt as to whether, and how, the foods might be able to reduce mental appetites and cravings driven by emotional, mind-related eating motivations. This rationalisation thus, negated the hunger control benefit if it worked on hunger signals from the stomach alone. Previous research into the concept of satiety has largely centred on measures of hunger and fullness (e.g., Cardello. Schutz, Lesher, & Merrill, 2005), but in agreement with Murray and Vickers (2009) the consumer experience is not a simple matter of a duality between these states. Instead, consumers were shown to consider the desire to eat and the role of appetising food in their appraisals. They indicated they could feel both mentally hungry, and physically full, at the same time, and be hungry for certain foods and not for others. The counter-argument regarding emotional eating when one is not hungry is a powerful personal reason for doubt, and difficult for consumers to resolve.

Differences in the personal understanding of food manufacture and processing systems were also evident in the overall cognitive sense making. In line with previous findings for functional foods, consumers were shown to use simplifying heuristics and make assumptions about the negative connotations of food fortification (Lahteenmaki et al., 2013; Siro et al., 2008). As will be further discussed in section 8.4, personal values regarding how health benefits should be obtained were referenced widely, and the inclusion of ingredients which may alter the body function in some way, created negative perceptions. However, although a source as close to nature as possible was desirable, the way in which naturalness and wholesomeness were perceived, was subjectively and differently derived across the sample. As found by (Srinivasan & Till, 2002), the inherent credibility from a known brand provided some reassurance and increased the women’s perception of the potential attribute performance.
The research provided multiple examples of the sense-making for incorporating the foods into habitual food behaviours. One of the more distinctive observations about the cognitive sense-making was the tendency for participants to develop negative scenarios about the proposed foods. Counter arguing was used to establish how the concept might not be congruent with personal consumption and weight loss activities, given daily food and weight loss routines, and hedonic concerns. These findings were in support of the development of counterfactuals from existing knowledge as a way of making appraisals of new products (Bagozzi & Lee, 1999). As noted, cognitive elaboration under the Elaboration Likelihood Model (ELM) means more extensive and careful processing of information. Theoretically the presence of counter-arguments leads to a lowered intention to try (Bagozzi et al., 2002; Petty & Caccioppo 1986). However, in the present context, this counter-arguing was interpreted as a means of defending ones judgement on trying the foods. Possible disappointment was anticipated, which then enabled trial to be allowable, but remain protected. In this way, uncertainty was resolved by the reservation of judgment.

Overall, the research gave insight into the diverse cognitive sense making for the concept and the reasons behind the somewhat complex and uncertain quantitative response. It revealed the benefit is one which will be sought after by many women seeking weight loss, despite confusion over how it might work, and how it might be incorporated into current lifestyles. The somewhat disconnected description of the response paints a mixed and confusing picture for future marketers. Whilst it offers some possible bases for benefit segmentation and considerations for positioning, which will be further discussed in the following chapter, the main contribution for the research is the insight into the way in which believability judgements were influenced by other non-benefit associated factors, and the strategies used to resolve their uncertainty.

8.2 Scepticism by Default

The presence of an initial scepticism about the proposed foods was revealed to be widespread across the participants throughout the three studies. This was not unexpected, given the pervasive nature of the weight loss activities context (Prendergast et al., 2009), and evidence that consumer scepticism regarding health claims is intensifying (Fenko et al., 2016; Tan & Tan 2007). This research contributed by showing the way in which scepticism was present,
but operating with little apparent effect on the believability judgement itself, or future intentions about the proposed foods. Instead, scepticism was revealed, first and foremost, to be a defensive strategy, resulting from an overarching heuristic for weight loss products.

Scepticism is generally regarded in the literature as a negative initial response which may deter consumers from future trial and purchase. Because of this, the consumer tendency towards scepticism is regarded as one which needs to be reduced by convincing information (Morel & Pruyn, 2003), and the addition of greater clinical evidence for functional food (Grunert, 2013). However, the literature also shows the influence of scepticism on consumer attitudes and intentions is not simple to interpret. Whilst several studies have shown that consumer scepticism negatively influences consumer responses to food labels (Fenko et al., 2016; Tan, 2002; Tan & Tan, 2007), others suggest sceptical users are just as likely to be interested in using health claim information as less sceptical counterparts (Mazis & Raymond, 1997; Szykman et al., 1997). The findings from the current research would seem to support the latter research. Although 74% of participants in Study 1 indicated scepticism, this was not related to the believability judgement. Further to this, and somewhat surprisingly, 82% of those who had previously indicated that they ‘strongly believed’ the concept, also indicated they were sceptical. There was also no relationship found between the proxy scepticism measure and the intention to try the foods. Instead, the research indicates that scepticism may be divorced from other aspects of the evaluation, and be used as a strategy to provide a sense of self-protection.

Optimistic messages of ‘fast weight loss’ and ‘magic bullet’ solutions, are prevalent messages from the diet industry. A perception of the way in which the diet industry preys upon vulnerable consumers with body/image concerns to ‘make money’ was noted by participants, and for some, this was associated with the foods in question. This initially coloured the response, providing a reason for developing a resistance to the proposed concept. Initial contesting strategies were revealed (Darke & Ritchie, 2007; Friestad & Wright, 1994; Ham et al., 2015). These were interpreted as a defensive reaction to build against the risk of deception, manipulation and the perceived ulterior motives of marketers and, in some cases provided a personal sense of empowerment from being regarded as a vulnerable, gullible consumer.
Scepticism or a tendency to be disbelieving is also thought to be a personal trait, developing in reaction to persuasive consumption environments as part of a socialisation process (Amos & Grau, 2011; Annunziata & Vecchio, 2011; Obermiller & Spangenberg 2000). This was confirmed in the Study 1 findings, where participants who saw themselves as more likely to agree with the statement ‘I believe most things I read’ indicated higher believability responses ($r = 0.259$, $p < .05$). For several Study 2 participants, ‘sceptical’ talk was established as a way of being prudent. It was an expression of a sensible consumer approach, driven by a generalised association with the ‘persuasive’ diet and weight loss products marketplace, rather than specific doubts about the particular concept.

These findings hold important implications for future marketers. Direct associations may be made between future functional weight management claims and current diet industry solutions and offerings. Awareness of these embedded biases allows future marketers to avoid over promising regarding weight loss outcomes. It is important that a delicate balance be achieved between claims suggesting an ‘easy’ approach, and those which adequately communicate the benefit of the satiety enhancement claims, and the longer term benefit of sensible practices for weight loss.

Whilst clinical substantiation may be likely to enhance the concept to some extent, the research suggests that this engenders scepticism, and testing practices are not generally seen as ‘trusted’. In contrast to studies which have found scientific claims to be important in the acceptance of health benefits (Dodds, Tseelon & Weitkamp 2008), in this context, clinically proven claims did not increase believability. Rather, they serve to reassure those who already have some degree of motivation to purchase, and conversely may elicit additional scepticism for those who are not so inclined. In summary, therefore, the findings from the present research contribute to existing theory by showing that, whilst prior scepticism occurs in general, and for the concept directly, it is primarily used as a general defence strategy, stemming from the use of the heuristic ‘bias to disbelieve weight loss claims’. Consumers can express their uncertainty and doubt, and be seen to be ‘sensible’ and considered. But, they can then remain open to the opportunity to buy and try the foods, without any possible later, future disappointment.
8.3 Hope and Motivated Reasoning

8.3.1 Hoping or Believing

Given previous indications of inherent personal biases in believability responses (Andrews, et al., 1991; Jones & Rossiter, 2004), the influence of underlying emotional influences on the believability responses was a major area of interest for the study. The notion that goals and motivations impact reasoning, choice, and decision making has been influential in the social psychology and consumer research literature (Bettmann, Luce & Payne, 1998; Kunda, 1990; Perugini & Bagozzi, 2001; van Osselaer & Janiszewski, 2011). Similarly, the concept of a motivational component in making appraisals of uncertainty has been recognised amongst appraisal theorists (Johnson & Stewart, 2005; Roseman, 1984; Scherer, 2005; Smith & Ellsworth, 1985).

As revealed in section 8.1, the presence of women who indicated they strongly believed the concept of the proposed foods was revealed throughout the current studies. However, the possible influence of a motivated bias on these judgements was also indicated. Women, who rated the achievement of their weight loss as very important to them, and those who perceived they had less control over their weight loss were more likely to indicate they believed that the foods would work for them. This indicated greater hope for additional personal control benefits. These findings are aligned with those in the context of health supplements (Mason & Scammon, 2011), where individuals with higher directional goal motivations were more likely to believe health claims.

Believability judgements in the present research, because of their uncertainty, were interpreted to elicit responses which encapsulate hope. MacInnis & de Mello (2005) theorise that uncertainty about the consequences of consumption can be affected by the yearning component of hope, and this is underpinned by the appraisal theory framework where uncertainty stimulates complex emotional responses which generate hope, fear and/or disappointment (Johnson & Stewart, 2005). Hope is also theorised to lead to motivated reasoning, where a biased subset of relevant beliefs is accessed (Kunda, 1990). As anticipated at the outset of the research, hoping and believing are concepts which are difficult to separate empirically. They are closely intertwined, personally interpreted and experienced states. Their complexity and interchangeability was demonstrated across the research where ‘strong
believers’ were also found to also be sceptical to some degree, indicating a delicate balance between wanting to believe in a favourable outcome, yet recognising the possible limitations of being too hopeful. The presence of hope was interpreted to be manifested differently across participants, as found by Wang et al. (2013). In some cases hope meant a presumed believability, whereas for others, it merely allowed openness to an opportunity that might be within the realms of possibility. It appears that the cognitively influenced responses of what one ‘should’ believe, were counteracted by the emotionally driven intensity of the response of what one ‘wants to believe’ in working towards a desirable state.

8.3.2 Weight Loss Motivations

Underlying these hopes were the personal motivations interpreted as providing the impetus for weight loss activities. The role of more abstract superordinate goals such as self-esteem and social acceptability are regarded as motivating or directional goals, and these indirectly were given reference in many of the women’s accounts (Austin & Vancouver, 1996; Beruchashvili, Moisio & Heisley, 2014; Bagozzi & Edwards, 1998; Kunda, 1990). As found by Kwan (2009), despite open criticism of the unattainable, and unrealistic media portrayals of women and the beauty culture, throughout the interviews participants commonly discussed their positive desires to wear smaller sizes, and reflected upon their hoped for self, and their aspirations to be thinner (Markus & Nurius, 1986; Patrick, MacInnis & Folkes, 2002).

These underlying societal forces emerged as a constant pressure with which to deal. The fervour of several participants towards their goals for personal appearance motivations was evident. For example, Emma (36) saw her appearance as critically important in the male dominated workplace in which she works as an electronic engineer. Keeping in shape, gave her the personal strength to combat the ‘sexist’ remarks with which she was often confronted. She believed the foods would work for her. These societal factors continue to also be observed by other authors in the United Kingdom (Whale et al., 2014; Woodruffe-Burton & Ireland, 2012) and the USA (Kwan, 2009).

Importantly, women who had a greater amount of weight to lose did not necessarily view the proposed foods as more believable; however, interestingly they did indicate a higher interest in trying them. The in-depth interviews, provided insight into the ongoing challenges and expectation of disappointment that exists for this segment, which possibly explains this intended trial response and lower believability. From the resigned perspective of some
women, who have been challenged with their body size for long periods of their life, weight loss has come to be viewed as outside their own control. For some there was a sense of inevitability and predestination for overweightness. Negativity and pessimism about the task ahead, meant hopefulness was not evoked for these women, reflecting a general lack of optimism about their weight goal, and the task ahead. This was in contrast to women whose weight loss was perceived as very important, who were more likely to respond with higher believability judgements.

This suggests differences in the way hope may be implicated in believability judgements due to differing motivational states for weight loss activities. The differing valence of the anticipations was clearly demonstrated in Study 2, and these appeared linked with the relevant avoidance or approach focus. Distinctions can be made on the basis of self-regulation theory (Higgins, 1997) according to whether one is avoiding being overweight (prevention focussed) as opposed to approaching positive weight loss (promotion focussed). For some women, body/image and weight experiences had centred on the negative emotional reactions of their perceived stigmatisation (Granberg, 2011). Underlying social needs to transform oneself for the greater admiration of others provided a different impetus for their weight loss activities (Beruchashvili et al. 2014; Belk et al., 2003). An avoidance motivation was indicated because of emotions associated with guilt, scepticism and disappointment. This led to a negative expectation of success with low future personal believability judgements. These findings lend support to the growing body of theory which shows the differing valence and intensity of the presence of hope in consumer decision making (Poels & Dewitte, 2008). It may be possible to gain more understanding of this linkage between believability judgements and approach and avoidance foci, by more directly testing theory in this respect.

In summary, the research is one of the first to explore the role of hope as an emotional influence on believability judgement. It contributes to this stream by revealing the way in which hope was inherently implicated and interwoven in the assessments for women, particularly those with higher goal importance, and lower perceived control over their weight loss activities. Previous initial conceptualisations have provided a more rational, information processing approach to hope, which shows it performing differently under varying involvement conditions (MacInnis & de Mello, 2005). In contrast, this research shows different individual capacities by which hope is brought to bear on the judgement, and how it allows an interest in buying and trying to be kept alive.
Concerns have been expressed previously regarding the potential consumer interpretation and overestimation of the satiety benefit (Booth & Nouwen, 2010). The possibility of biased judgements by some women over the need for their own adherence was apparent. An underlying desire for ‘a magic bullet solution’ is sought after by women, particularly those who have experienced difficulties, and perceive their personal control to be reduced. Because of this, they made associations with the ‘science’ involved in the foods concept, and in some cases, gave the foods a ‘magic bullet’ status. For future marketers of weight management functional foods, the main implications of these findings are the diversity in the trial and purchase indications by the women involved. The research indicated the potential purchase interest for such foods, although dependent on marketing mix factors, will be high. However, this will be done with varying amounts of pre-trial hopefulness. For example, those with a larger amount of weight to lose, indicate a higher disposition to try, but hold lower overt expectations. This has important implications for the segmentation and targeting of future communications and the way in which the benefits are positioned, which are further discussed in section 9.2.

The next three sections discuss the underlying themes theorised to underlie what constitutes believability for consumers. They show the way in which participants in this context were actively creating their own sense of believability, rather than receiving benefit information which was not connected to themselves and their personal experience.

### 8.4 Believability and Compatibility

Consumption is widely viewed as holding a symbolic purpose and meaning by which people seek, create and reinforce their concept of themselves (Arnould & Thompson 2005; Belk 1988; Borgerson, 2005; Sirgy 1982). As expected, consumer believability judgements, as a personally significant consumption appraisal, were strongly linked to whether the proposed foods were perceived as aligned with participant’s individually constructed identities. Compatibility with personal beliefs and values about food and weight loss activities was first and foremost, an initial consideration for the participants, serving as a preliminary filter, and forerunner to further judgment (Bagozzi & Lee, 1999; Hoeffler 2003). One’s identity is aligned with, and arises from, an individual’s core values (Hitlin, 2003; Schwartz, 1996, 1992), and fundamental interpretations made by the women about the foods were revealed to
be subject to deeply held personal values of acceptability. A strong association was revealed in the findings of Study 1, where a positive relationship was confirmed between consumer believability responses and the compatibility of the foods with both general beliefs ($r = 0.76, p < .01$), and weight loss ideas ($r = 0.87, p < .01$). Viewpoints were revealed across the research from those who “strongly disbelieved” the concept. These gave particular insight into the reasons for a fundamental misalignment between the concept foods, and the multiple aspects of these women’s identities.

### 8.4.1 Food Purism

For participants who self-identified as food “purists”, the acceptance of modified, processed, and or/ manufactured foods including functional foods was viewed as not only misaligned with their personal values, but in one case provoked an emotionally driven sense of outrage. Fundamental concerns about man’s manipulation of nature provoked conflict with the concept, which was perceived as ‘unnatural’ and encroaching upon the sacred arena of food as nature intended it (Belk, et al., 1989; Biltekoff, 2010). This connection with nature has been traced to an overarching human quest for meaning (Wong, 2013). Those identifying as food purists, saw a greater benefit from the synergistic advantage of naturally derived health benefits, over those which had been “extracted” and then “shoved” into another possibly unrelated food. These women were reminiscent of Danish consumers identified by Kristensen et al., (2013), termed “the informed”, who identify themselves with firm principles, hold a strict regard for healthy eating, and who do not trust experts, authorities, and the food industry. They illustrated higher order altruistic values involving a worldview orientation, as evidenced by their desire to help others to improve their own health and wellbeing, and their attention to the suspected vested interests and manipulative tactics of the food industry.

This process of cognitive appraisal was in support of the appraisal theory dimension of moral compatibility, where the personal significance of a new situation or information is appraised for alignment with deeply held values, norms and beliefs (Frijda, 1986; Johnson & Stewart, 2005), and for compatibility with what is perceived to be acceptable, moral and right (Lazarus, 1991b; Scherer, 2005). Notably, the dis-believability response which emerged appeared to be dominated by incompatibility issues rather than doubts surrounding the functional expectations of the performance of the foods. That is, it was not the product concept that was necessarily found ‘unbelievable”. Instead, believability assessment was morally charged, and construed from an abhorrence of the perceived deterministic behaviour
of marketers within food consumption markets, reflecting an attitudinal aversion related to personal identity needs (Hogg et al., 2009). As Askegaard et al. (2014) have recommended, further research should continue to uncover the nature of emerging moralities of food and health consumption across contexts from a consumer perspective.

8.4.2 Identity Congruence

The requirement for congruence with one’s perceived social identity, and for the reinforcement of one’s desired identity were also revealed (Tajfel & Turner, 1979; Tajfel & Turner 1986). Participants frequently self-categorised themselves away from out-groups, and consumer stereotypes they perceived as heavily overweight/obese people. These were also often associated with their undesirable self (Markus & Nurius, 1986). In general, discussions on the types of people who would use the foods provided insight into the desire of participants to not be associated with those who are perceived as out of control, such as ‘desperate people’, and those with more profound weight loss issues. As Natalie (30) commented “a sexy man would not buy this bread”, indicating her perception that the proposed foods were not aspirational. She communicated her identity and status by the rejection of the symbolic aspects of this consumption, rather than its more functional attributes (Banister & Hogg, 2004). In contrast to these more extreme views, the majority of participants, despite uncertainty, indicated an interest in purchase and trial, forging some degree of compatibility with their perceptions of ‘natural and healthy’ foods. Whilst risk perceptions on personal safety levels were put forward and considered (Herzenstein et al., 2007), these were alleviated if the ingredients were sourced from natural fruit and vegetables.

The literature indicates there are underlying attitudinal differences to the concept of functional foods with added health claims as a general means of obtaining health benefits (Urala & Lahteenmaki, 2007, 2004). This was supported in the present context, where a moderate relationships ($r = 0.32, p<.01$) was revealed between the believability judgements and the attitudes to functional foods. The involvement of science and technology in food proved to be a source of polarisation for the women, with negative references to food processing, food additives and genetic engineering stemming from a general desire for food ‘naturalness’ and reflecting the development of modern food worries (Devčich, et al., 2007; Grunert, 2013). Considerable differences in consumer understanding of food system principles were evident, and this understanding, although serving as a source of confusion for some consumers, did not curtail interest in the foods themselves. Future qualitative research
into consumer perceptions of functional food manufacture forms an ongoing area for future research to reveal possible food system understandings. Implications for future marketers from these findings are discussed in section 9.2.

8.4.3 Food Compatibility

In terms of appropriate food carrier choices, the research indicated the potential difficulties in meeting personalised requirements, stemming from individual priorities and preferences. Overall, the qualitative indications revealed that foods which are perceived as healthy, such as wholegrain breads are most appropriate carriers. Food types which are already perceived as more slowly digestible are also more likely to be believed, with food being seen as more congruent because it is more satisfying and filling than a milkshake or drink. The requirement for a range of foods was also stressed to avoid boredom with the foods if they were to become a part of the food routine on a daily or regular basis. They also indicated that it is important that the taste is not affected by the fortification or the ingredient (Verbeke, 2006). Whilst, participants thought it was possible to enhance ‘treat’ or ‘snack’ foods in this way, it was generally not regarded to be as believable as the synergy provided by more healthy foods associated with weight loss. However, interestingly, bread was also perceived as not appropriate in some cases because of its stodginess and carbohydrate content, with white or refined bread seen as inappropriate. Hence, future decisions on the selection of suitable food carriers requires further regional-specific research to best ascertain the most appropriate variety of foods.

Overall, the present research contributes to existing theory by establishing the importance of personal compatibility assessment within consumer believability judgement on multiple levels. In this context, the dis-believability was driven by the dislike of the general concept of food fortification, rather than possible doubts about the performance benefits of the foods themselves. Where there was incompatibility, this gave certainty and further believability judgement was curtailed.

8.5 Believability and Control Perceptions

The research contributed towards new understanding of how perceptions of control were implicated in the current judgement. The need to find and sustain personal control, or willpower to prevent overeating, was at the heart of the weight loss challenge for many
women. However, the way in which control was regarded and sought was revealed to be different across the participants. This influenced how they thought about their believability judgement. For some consumers it was seen to be beneficial to find empowerment from oneself, whereas others in contrast, regarded control as necessary from an external empowerment.

Across the studies, those with lower self-control perceptions over their weight loss activities, showed a greater tendency to indicate that they ‘believed’ the fuller for longer benefit would work for them. In study 1, those who felt less in control of their weight loss, were more likely to indicate higher ‘believability for self’ responses ($r = -0.28, p<.01$), and believability means significantly increased for this group. As revealed in Study 3, finding an external product or activity which provided a sense of added control and support was construed as an important and meaningful personal believability construct for some. This finding is interpreted as indicating the presence of motivated reasoning about the possibility of a source of control, and the hope for less reliance on one’s own adherence behaviours (Kunda, 1990). It also resonates with that of Bilman et al., (2012) where, those identified as restrained eaters were found to be less likely to see the need for personal responsibility from foods with a satiety claim. This need for support had previously manifested itself in multiple, and at times, demoralising, attempts of different weight loss programmes, short term diets, meal replacement plans, appetite suppressants, and pharmaceutical support. For example, Cathy (58), found the foods concept to be very believable, because of her faith in science to control what she had previously found to be uncontrollable with behavioural changes alone. Despite internalising the need to maintain restraint, these women felt overcome by the desire to eat what is bad or forbidden. Because of this, they desired a solution to simplify their choices.

In contrast to this, the research also identified women who believed weight loss was their own personal responsibility, and their own actions would influence their weight management. They saw less personal requirement and relevance for the foods in question. This adds support to theories showing the way in which trait differences in self-control and self-regulation are associated with successful weight loss behaviour (Armitage & Conner 2001; Baumeister & Heatherton, 1996; Redden & Haws 2013; Stroebe et al., 2008; Teixeira, Going, Sardinha & Lohman, 2005). In the present context, the findings are closely aligned with and could be explained by previous research into the way in which control is personally perceived amongst individuals attempting weight loss. The Weight Locus of Control (WLOC) has
productively distinguished between external WLOC individuals who view their weight as outside their control, due to chance or genetics, and internal WLOCs, who believe their weight loss is personally controllable (Holt et al., 2001; Martin, et al., 2006; Saltzer, 1982). In the present research there was a clear indication that control perceptions centred on whether external control was desired, and in some cases, this led to an option being viewed as more believable. The findings are also in alignment with those of Beruchashvili et al., (2014) who explored the role of different personal lay theories on dieter’s goal setting. The authors found female dieters attending Weight Watchers, differed based on their beliefs about how changeable they viewed their personal qualities to be. Those who saw themselves as less malleable in terms of their personal qualities, for example their intelligence, self-confidence and morality, focussed on weight loss to improve physical appearance, find a relationship partner, or to achieve a sense of normalcy. In contrast those who saw their qualities as changeable, held higher order weight loss goals associated with developing self-knowledge, and weight loss competence.

Existing literature provides considerable insight into the role of technology as a positive enabler in consumers’ lives, and in doing so underlines overarching tensions and paradoxes as they interact with it. The research confirms that although functional foods are associated with convenience, competence and control in obtaining health benefits, they can be seen as an intrusion and lead to feelings of reliance and ineptitude (Mick & Fournier, 1998). Acceptance of having external control holds value for some consumers, but for others suggests laziness, and a lack of one’s own resource. The way in which products and services interact with a person’s sense of their own agency or mastery of a situation continues to develop as a theoretical sub domain of consumer agency (Belk, 1991; Otnes et al., 2014). The research empirically contributes to this emerging research stream by showing the way consumers attempted to assess the agency benefits for a concept in the light of their own perceived personal agency goals and abilities. The desire to use a product to help gain a sense of ‘belief in oneself’ adds to the developing theory on the dimensions of product agency benefits as explored by Otnes et al., (2014). Furthermore, the need for a solution which can be ‘believed in’ adds another synergistic dimension to product agency benefits, of a greater spiritual wellbeing to transcend impediments from prevailing social forces. These views strongly echo those of weight loss participants (St James et al., 2011), who sought a chimerical agency from weight loss, and convey a sense of having faith in, which moves believing to the dimension of ‘believing in’ as distinct from ‘believing that’.
These findings regarding personal control perceptions have ramifications for marketers. Whilst, the research showed that most participants were realistic when it came to understanding the need for personal adherence and responsibility, others are seeking greater personal control and empowerment, and may hold greater receptiveness to the concept. Future segmentations of consumers, made on the basis of this ‘need for control’ need to consider the possibility of those consumers who will desire an easier solution.

Overall, the research contributes to existing theory by identifying the ways in which believability judgments are differentially impacted by personal control perceptions. The degree to which one perceives to be in control over oneself and able to influence life events has a powerful effect on many aspects of behaviour (Rotter, 1966), and appears to be a fundamental driver of the judgement. The benefit of obtaining hunger control from an added fortified ingredient was construed very differently across the sample, and shown to be dependent on perceptions of a need for control and the challenges at hand. The complexity of assessing one’s personal self-control, knowing where control might arise from, and how this might be assisted by the additional control of a functional food benefit, needs further understanding. The decision as to whether and how the foods might work was therefore, for most participants, reserved, with others indicating openness and/or overt hopefulness, to avoid missing out on a possible solution.

8.6 Believability and Personal Confirmation

8.6.1 “The Proof is in the Pudding”

The identification of women’s requirement for believability to be confirmed by personal usage, or by the advice of a significant other, was a novel area of contribution for the research. The participants were revealed to be seeking confirmation, familiarity and personal experience. They found believability in existing products and activities with a proven track record, and the importance of word of mouth communication between consumers was strongly indicated as influential on the judgements (Sweeney, et al., 2008). Whilst, this was not unexpected, the research showed they different way in which the women regarded making such a judgement. It indicated that they were seeking confirmation for something that was not just believable in terms of proposed benefits, but also one to which they wanted to personally commit. As found for consumer meaning making for authenticity (Beverland & Farrelly, 2010), consumers were actively defining and conferring their own believability,
rather than being passive receivers of attribute information. Far from being perceived as ‘gullible’ consumers following the persuasion of the weight loss/ dieting industry, many saw their own competence in selectively finding what was right for themselves.

Consumer believability decisions were therefore interpreted to be personally significant, temporal, protected and valued. Holding ‘believability’ is to arrive at a judgement, inferring little doubt or uncertainty, which needs to be justified and is one that goes further than an assessment of possible attribute believability. Support for this finding was indirectly found in the Study 1, where the statement ‘fits in with my personal beliefs’ had a moderate relationship with intention to try ($r = 0.44, p<.05$), but a strong relationship with consumer believability ($r = 0.73, p<.05$). This further indicates that achieving believability needed some personal compatibility, whereas the desire to try stemmed from a simpler call to action.

### 8.6.2 The Fear of Missing Out

The research also uncovered the way in which uncertainty was resolved. In the online survey, 45% of participants indicated they definitely would try the foods, and a further 37% indicated they might try. However, as discussed, this was not necessarily linked to previous meaning making about the efficacy of the foods, and was not based on a cognitive foundation. Instead, trial of the foods was revealed as providing an opportunity for one to ‘give it a go’, just in case this option can make a difference. In this way a sense of hopefulness and thus personal self-esteem was maintained, in a consumption area of challenge. The behavioural component of the judgement was required and preceded cognitive and affective components, as a way to minimise the possible occurrence of cognitive dissonance. This pragmatic strategy has been observed in research into the appeal of infomercials (Dimofte & Yalch, 2007).

A theoretical explanation for this is suggested to be that the women hold a fear of missing out on a possible option that may work. As noted in Chapter 6, the Fear of Missing Out (FoMO) has received recent attention (Hetz et al., 2015; Przybylski et al., 2013; Riordan, Flett, Hunter, Scarf & Conner, 2015). The construct has been studied within the theoretical framework of self-determination theory (SDT) (Deci & Ryan, 1985), where effective self-regulation is based on the needs of competence (personal efficacy), autonomy (personal initiative), and relatedness (connection with others). Przybylski et al., (2013) have shown that, individuals with low levels of satisfaction have higher levels of a fear of missing out, and are more vulnerable to experiencing it. Whilst there are clear differences between the
above FoMO contexts and the present weight loss consumption area, there are similarities that echo the experiences of women who struggle with their weight loss and feel that they lack personal control. This research therefore suggests further exploration of FoMO as a consumer decision making construct in functional food credence contexts, and where purchase actions are motivated by trying in the ‘hope’ that something might work, where there is not a strong judgement of believability or confidence that it will.

8.7 Chapter Summary

The discussion chapter integrated the main findings from across the three studies and revealed the very different way in which believability judgements were regarded across the sample. Firstly, the content of the cognitive appraisals was discussed, and the counterarguments about the eating/hunger disconnect were highlighted. The research also showed the way in which women used scepticism as a defence, but also, due to motivations associated with body image, maintained a measure of hope. The way hope was implicated differently in the judgements was discussed. It was interpreted as motivating the desire to buy and try the proposed foods in order to not miss out on a potential solution. Overall, believability, in the present context, was shown to be an important and valued judgement. Achieving a state of conferring believability is highly desirable, but requires compatibility, an alignment with control needs, and one which will be awarded once confirmation has occurred.
Chapter Nine: CONCLUSIONS

This chapter concludes the thesis by providing an overview of the research in relation to the overall research purpose. It articulates the theoretical, substantive and methodological contributions of the work. It then outlines the implications, limitations and opportunities for future research, before a final conclusion is made by the researcher. To recap, the research was undertaken to explore previously unstudied aspects of consumer responses to functional foods, in recognition of the credence nature of their claims, and the increasing presence of scepticism for such claims. The thesis argued that it was important to capture the way in which consumers make such decisions, as a personal judgement of a desired outcome aligned to the long established notion of outcome expectancy. In designing the study the way in which believability has previously been utilised in consumer research practice and theory was found to be reliant on quantitative measures of source credibility and the expected consumer assessment of benefits. The constructivist enquiry therefore, set within the context of women’s weight loss activities, aimed to go further than past research to explore what constitutes believability for consumers, and the strategies they use to make their judgements.

9.1 Research Contributions

Contributions to theory in marketing and consumer behaviour fields can be made in a multitude of ways (MacInnis, 2011). The main theoretical contribution for this research is towards conceptual understanding of consumer believability as a construct pertaining to new concept/product evaluation, which to date remains embryonic. The research contributed by showing differences between believability and the related concepts of acceptability and credibility which have previously been included together as a construct (e.g, Gurhan-Canli & Maheswaran, 2000). It revealed that, the way in which a benefit can be seen to believable is multifaceted, and this suggests the need for careful operationalisation in future research efforts.

One of the key differences between this research and previous research lies in the identification of personal motivations, and market sentiments on the cognitive benefit judgement. The research is one of the first to explore the role of hope in believability judgement. It indirectly contributes to this stream by revealing the way in which hope was interwoven in the assessments, especially for some women with higher goal importance.
Insights were gained into the role of hope which led to an openness to buy and try the proposed foods, despite scepticism and uncertainty. The way in which women dealt with this source of conflict according to different approach and avoidance motivations contributes to current theories related to consumer hoping processes. One productive area of contribution for the research is the identification of different believability/hope responses according to the regulatory focus of the consumer (Higgins, 1997). The self-regulatory framework has been used to study motivations for health activities, and behavioural differences have been found based on the orientation of focus, as well as the likelihood of purchase of new products (Herzenstein, et al., 2007).

Consumer scepticism for new products is also an emerging research stream which to date has largely focussed on quantitative scale development and scale reduction (Morel & Pruyn, 2003). The present research contributes to this stream by showing the way in which consumers use scepticism to defend and protect their future purchase decisions which involve uncertainty. The way in which they develop their own sense of agency by holding scepticism and doubt to serve as a protection against being deceived by over marketer promises, forms a potential area for future research exploration.

The research also reinforced existing Appraisal Theory dimensions. Although a shortcoming of appraisal theories is seen to be their psychological orientation and lack of social context (Scherer, 2005), the underlying dimensions usefully explained differences in the way in which believability judgements were made by different participants. A possible limitation of appraisal theory is its focus on personal and individual assessments of significance, which may not allow cultural differences to emerge. By making linkages between consumer believability judgements and established theoretical consumer constructs such as identity constructions, self-control perceptions, and motivations, the research showed the importance of further understanding the way in which socio-cultural forces impact benefit judgements.

The research empirically informs the emerging research stream which investigates consumer perspectives of product agency benefits, and the perceived role of a product in helping manage life impediments (Ottes et al., 2014). In this context, the research showed the way consumers attempted to assess product agency benefits in view of their own perceived personal agency and abilities. A paradox of self-efficacy, where consumers who see themselves as capable and controlled see less need for such a concept, was revealed. In
contrast, the need for some finding “faith” in a product by other consumers adds another dimension to product agency benefits.

The research also developed the concept of purchase and trial from a desire to “not miss out” on a potential benefit. Rather than holding confidence in an outcome, women were shown to indicate their interest in trying where doubts and scepticism were held simultaneously with openness for purchase. Further specific investigation of the FOMO phenomenon is warranted across other contexts to assess its potential for understanding consumer behaviour when credence is involved in the decision making.

Substantive contributions were made regarding how weight loss activities in general are evaluated and judged by women seeking weight loss. The research adds to knowledge of consumer perceptions of self-control and self-regulation failures in weight loss activities which have previously understood using experimental methods. Insight was given into the way participants who saw their challenges as being internally driven by the mind, which was perceived to be outside their behavioural control.

The research contributed to the functional food literature by providing new insight in understanding how consumers make sense of health claims of a credence nature. It showed the way in which views of personal control differ, and may be influential on attitudes to such benefits which offer convenience. The research facilitates further conceptualisation of the consumer believability construct within functional food contexts, and the wider domain of consumer evaluations of credence concepts and products.

Methodological contributions were made by the use of the mixed methods methodology as a means to interpret evaluations of a proposed weight loss activity. A richer knowledge was gained by the integration of the three methods which allowed the response to be closely explored from different participant perspectives. A specific methodological contribution was the utilisation of the Repertory Grid Technique (RGT), (Kelly, 1955), to assess personal constructs regarding believable weight management activities.
9.2 Research Implications

The implications of the findings are provided below in three sections, for future marketers of weight management functional foods, functional food marketers and public policy makers.

9.2.1 Implications for Marketers of Weight Management Foods

Satiety enhancing food products are seen as an important means of assisting consumers with their weight loss, however, numerous questions remain regarding how they can best be targeted and positioned (Hetherington et al., 2013; Van Kleef et al., 2012). The present findings highlighted uncertainty regarding whether the proposed foods would in fact control ‘eating whilst not hungry’. Consumer misunderstandings were evident about the differences between the benefits of satiety and satiation. It was apparent that for many participants, the most pressing concern was being able to tackle emotional eating episodes at the time of their occurrence, rather than having an extension of the time between eating occasions. This means marketers will need to clearly establish claim wording to convey the way in which the benefit may be expected to assist with weight loss. The differences between the terms mental hunger, appetite and physical hunger are of great interest for some consumers. Clarity in future claim wording is essential to convey how the benefit will work in terms of the physical and emotional eating dichotomy that consumers are known to make (Murray & Vickers, 2009).

The required methodologies to clinically assess weight loss related claims will need to reach some consensus (Blundell et al., 2010), and at the time of writing, testing of the benefits, and the subsequent claims, which can be made are unknown. At this stage, the substantiation appears to be limited to more immediate hunger control claims rather than the longer term benefit of weight loss. However, the research indicated the ongoing lack of credibility held by participants for clinical claims. Unless there is clear disclosure of independent testing procedures, and adequate sample sizes, such testing is likely to be viewed with scepticism by many women.

The research also showed the potential difficulties for future marketers in developing appropriate food carriers. Idiosyncratic tastes and preferences were revealed and showed the ways in which different foods were differently seen to be suitable. The research indicated that foods associated with greater fullness sustaining properties, were more likely to be believable
carriers rather than unrelated ‘treat’ type variants. Further research into country and regional specific foods will be an important aspect of future launch activity.

The research has implications for targeting decisions based on the requirement for the benefit. As anticipated in previous research, the benefit it is not likely to be seen as a magic bullet by most women (Bilman et al., 2012; Mela, 2010), and as discussed, scepticism will be prevalent. However, the viewpoints of more vulnerable women consumers have been noted, and were revealed in the present research. It is important to stress that over interpretation of the benefit is possible by those with complex, and negatively valenced goal motivations. This segment, who indicated high pre-trial believability are likely to purchase and try with different expectations which may translate into less sustainable long term outcomes. This means that a balance must be achieved between a positioning which encourages purchase, yet gives sensible expectations. As mentioned, this is recommended over an approach that employs aggressive persuasive techniques, suggesting over-promising of an ‘easy answer to losing weight’.

The increasing view of weight loss to achieve health and naturalness was an overt construction in the repertory grid interviews, where the desire for overall health and emotional wellbeing were also placed above weight loss as an end in itself. There was a motivation to feel that one was in control over one’s life, by being able to control this aspect of one’s body, and in this way, consumers with these views may be more difficult to attract. To move beyond existing weight loss appeals and to better resonate with women seeking weight loss, it is suggested that clear usage guidelines and lifestyle activities are included as part of a supplementary marketing program. It is important to acknowledge the realistic nature of the approach. For example, the foods could be promoted as part of activities involving low calorie days, as a useful addition to available weight loss alternatives. By positioning the foods as a short term transitional step to initially enhance control, this allows a sense of personal empowerment to develop. This could inspire a self-directed behavioural change towards longer term, healthier eating habits from lower energy meals, rather than a reliance on a product which may ultimately remove a sense of personal empowerment.

9.2.2 Implications for Functional Food Marketers

The challenge for marketers of functional foods is viewed as one of building trust and credibility from claim substantiation (e.g., Grunert, 2013). However, this research indicates
that whilst the enhancement of credibility from clinical substantiation may help to build trust for those who are already motivated to try, the many personal factors that are brought to the judgement need consideration and understanding. The continuing desire for foods which are unprocessed and perceived as natural was clearly evident in the New Zealand interviews. Differences in the consumer understanding of production processing and food manufacturing systems were evident. The research suggested many consumers use simple heuristics as a response to the complexities of the marketplace and responses associated with modern health worries were prevalent (Devcich et al., 2007). They seek naturalness, defined in their own way, and combine processed, manufactured, or refined foods into a category they denote as ‘generally bad for you’. Emphasising the naturally occurring compounds as well as the health-enhancing properties of the food itself cannot be overstated, to overcome initial perceptions of the unknown risks associated with food fortification practices. Marketers can therefore adjust practices according to the finer distinctions of what consumers are seeking, for which previous quantitative measures have not accounted.

For marketers of functional foods the research offers further insight into the potential market segment more likely to engage with obtaining added health benefits in this convenient way. Notions of control and discipline remain pivotal points in many health and wellness behaviours, and it is possible that such control perceptions are central to decision making for such foods (Urala & Lahteenmaki, 2004). It appears that a segment exists that is positively pre-disposed to obtaining a sense of personal agency to support their own resources. This therefore presents an interesting paradox for future marketers of foods of this type. It is important for marketers to appreciate the differing ways in which consumers seek to find a source of control. By appreciating this need, marketers can continue to extend their focus on how functional benefits can be positioned to empower and ensure personal adherence behaviours towards overall health and wellness. How perceptions of control over one’s health and wellness, and the extent to which such activities are perceived as a personal responsibility, remains a significant area of interest for functional food consumer researchers and marketers. The present research suggests that consumers may be polarised based on their views of their fundamental human capabilities, but further exploration is warranted, including a more thorough investigation of relationships between believability judgement and the Locus of Control (LOC) and Weight Locus of Control (WLOC) constructs (e.g., Holt et al., 2001).
Substantial differences in ideological and philosophical beliefs about food consumption, and indirectly, weight loss activities were found. It confirms previous findings of the need for health claim relevance for functional foods (Dean et al., 2012). From this, future segmentation and targeting research strategies can be directed towards a relevant orientation, based on personal values and identity factors, rather than a demographic or attribute focus.

9.2.3 Implications for Policy Makers

The research also contributes to overall understanding of the susceptibilities of some consumers. Being overweight has an impact on many facets of overall health and life enjoyment, with social and cultural norms existing around body size and appearance. However, weight loss activities are undertaken in an environment where advice and activities conflict, and the unsubstantiated claims of the diet industry continue to have appeal to some consumers who are challenged, and seek “magic bullet” solutions. A deeper understanding of the presence of motivated reasoning by consumers highlights the on-going need for consumer protection and marketing claim regulation, and forms an important dimension for the research effort seeking to assist consumers to attain healthier lives. Substantial research continues into ways to understand the effects of independent health claim symbols (Hieke et al., 2015), and further research could determine whether these will give a sense of reassurance to consumers.

9.3 Limitations and Research Opportunities

The overall limitations of the research present several opportunities for future research. Further exploration of consumer believability judgement in other contexts is needed to test and potentially extend the findings of the present research. Firstly, do other functional food health and wellness claims promising desirable outcomes engender similar believability patterns in the responses? Are the themes of compatibility, control and confirmation found to recur? Can the presence of motivated reasoning and hopefulness be further replicated in other contexts?

The research was limited to Australasian women living predominantly in urban communities, and as noted, was not intended to be generalised. Weight loss activities and experiences are highly individual, and the responses captured were from a subset of women seeking weight loss at a particular point in their weight loss journey, in a culturally derived consumption
environment. For example, New Zealanders and Australians have a reputation for having an unrestricted, individualist, creed which has engendered a “do it your-self” “give it a go” predilection (Morris, 2005). Different sociocultural meanings of hope in collective societies (Wang, et al., 2013), and self-concept (Chang, 2010), have been previously observed. Additionally, the religious connotations of the way ‘hope’ is implicated in weight loss activities appears derived from Judeo-Christian religious foundations (Beruchasvili et al., 2013; St James et al., 2011). In the present study, cultural differences in conceptions and construal of believability were indicated, and therefore, further research in other countries and cultures will lead to a greater understanding of consumer believability as a phenomenological construct. The present research was also limited to women participants and did not seek to explore gender differences. Men have been observed to bring different motivations and attitudes to weight loss activities. Future research into comparing gender differences would also aid a more comprehensive understanding of believability judgements for the proposed foods and other product groupings.

The research involved responses to an abstract concept statement, and its applicability within complex, weight management behaviour. As expected, abstract assessments have a tendency to be uncertain, neutral and/or ambivalent (Neimeyer et al., 2001). The absence of marketing mix factors such as advertising and branding, normally used by consumers to assess trustworthiness and credibility aspects, were absent and created an artificial situation for the judgements. Future later staged product research is required using tangible prototypes with packaging, claims and branding. The credibility of certain brands was mentioned by some participants as partly giving some reassurance and it is of importance to further understand how these controllable activities may influence believability judgements. A possible limitation for the study is the way in which the positioning concept was worded. In suggesting an ‘easier way to control your eating’ for greater personal control, the statement could have been regarded as a form of marketing “puffery”. This was seen as necessary to convey the benefit, and over-inflation of the concept was kept to a minimum. Further research which compares different claim wordings is an important next step in progress towards the optimal statement and positioning of the benefit. For example, the impact of different message framings using approach or avoidance claims could provide further useful input here.
The inaccessibility and even unconscious nature of an individual’s motivations means explanations and rationalisations are often made to justify behaviours (Markman & Brendl, 2005). A limitation of traditional methods of questionnaires and interviews is that they might not provide accurate insights into these motivations and important emotions underlying consumers’ behaviour (Koster & Mojet, 2007). A fuller understanding of weight loss motivations using projective techniques represents an opportunity for deeper understanding of how these motivations may impact upon the evaluation of weight loss activities.

Further to this, the consumer believability construct may also have extended relevance in other credence contexts, for example personal appearance activities, where the outcome of a proposed consumption activity is difficult to determine even after consumption. In other disciplines, for example the law and media studies, exploring believability from the perspective of an individual, has relevance for understanding the possible motivated evaluation of information. Following further exploratory research, the testing and validation of a quantitative consumer believability scale for use in new product research concepts presents a research opportunity. This could eventually provide a practical indicative tool for context specific adaptation in concept testing research for future functional foods, to augment current practices.
9.4 Conclusion

At the outset of the research, contemporary food consumption was identified as an area of complexity and change, where consumers increasingly make individualised decisions regarding their health and wellness activities. The present research showed, within one context, the ways in which consumers are adapting to this new paradigm. They increasingly value consumption they perceive as natural, wholesome and authentic, and seek to develop personal strength using their own resources. Although many seek marketplace solutions, they were shown to be sceptical about such offerings, and do not expect easy solutions.

The thesis argued that consumer believability judgment, as a nuanced personal construct warranted exploration as an important aspect of the consumer response for functional food innovations. The findings indicated the judgment to be a philosophically central and protected response, providing new insight into consumer meaning making for foods which offer convenient health and wellness benefits. The research revealed the holistic nature of the judgement, where an emotional openness and ‘wanting to believe’ response was revealed alongside more negative cognitive rationalisations for what one ‘should believe’. This was revealed as a way of resolving uncertainty to protect emotional wellbeing, and not found to be a source of cognitive inconsistency.

In the context of a personal activity which has involved prior stress, feelings of powerlessness and lowered self-esteem for many women, the research revealed the desire to find personal resilience. Given prevailing sentiments about the weight loss marketplace, with its lack of sincerity and practical solutions, finding a ‘believable’ solution was revealed on an emotional level, to be a positive and uplifting source of value. For researchers and marketers, in current health and wellness consumption environments, understanding these complexities which transcend benefit evaluations, acknowledges this resilience and fighting spirit. It is hoped ongoing research into consumer believability judgements will lead to a greater understanding of the construct, and ultimately lead to ways of understanding how best to enhance consumer empowerment in their drive for overall wellbeing.
Appendices

Appendix A: Letters of Ethics Approval

Study 1

Office of the Vice-Chancellor
Research Integrity Unit

UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE

20-Apr-2012

MEMORANDUM TO:
Dr Denise Conroy
VISITOR

Re: Application for Ethics Approval (Our Ref. 8079)

The Committee considered your application for ethics approval for your project titled The personal believability of health and wellness benefits on 20-Apr-2012.

Ethics approval was given for a period of three years with the following comment(s).

Please clarify whether the research funded by Plant and Food Research or by the Business School.

If the project changes significantly you are required to resubmit a new application to the Committee for further consideration.

In order that an up-to-date record can be maintained, you are requested to notify the Committee once your project is completed.

The Chair and the members of the Committee would be happy to discuss general matters relating to ethics approvals if you wish to do so. Contact should be made through the UAHPEC secretary at humanethics@auckland.ac.nz in the first instance.

All communication with the UAHPEC regarding this application should include this reference number: 8079.

(This is a computer generated letter. No signature required.)

Secretary
University of Auckland Human Participants Ethics Committee
c.c. Head of Department / School, VISITOR
Prof Roderrick Brodie
Sara Jaeger
Ms Jennifer Young

Additional information:
1. Should you need to make any changes to the project, write to the Committee giving full details including revised documentation.
2. Should you require an extension, write to the Committee before the expiry date giving full details along with revised documentation. An extension can be granted for up to three years, after which time you must make a new application.
3. At the end of three years, or if the project is completed before the expiry, you are requested to advise the Committee of its completion.
4. Do not forget to fill in the 'approval wording' on the Participant Information Sheets and Consent Forms, giving the dates of approval and the reference number, before you send them out to your participants.
5. Send a copy of this approval letter to the Manager - Funding Processes, Research Office if you have obtained funding other than from UniServices. For UniServices contract, send a copy of the approval letter to: Contract Manager, UniServices.
6. Please note that the Committee may from time to time conduct audits of approved projects to ensure that the research has been carried out according to the approval that was given.
Appendix A: Letters of Ethics Approval

Study 2 & 3

Office of the Vice-Chancellor
Research Integrity Unit

UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE

13-May-2013

MEMORANDUM TO:
Dr Denise Conroy
Marketing

Re: Application for Ethics Approval (Our Ref. 9313)

The Committee considered your application for ethics approval for your project entitled The Believability of Health and Wellness Benefits.

Ethics approval was given for a period of three years.

The Committee considered your application for ethics approval for your project entitled The Believability of Health and Wellness Benefits.

Ethics approval was given for a period of three years.

The expiry date for this approval is 13-May-2016.

If the project changes significantly, you are required to submit a new application to UAHPEC for further consideration.

In order that an up-to-date record can be maintained, you are requested to notify UAHPEC once your project is completed.

The Chair and the members of UAHPEC would be happy to discuss general matters relating to ethics approvals if you wish to do so. Contact should be made through the UAHPEC Ethics Administrators at humanethics@auckland.ac.nz in the first instance.

All communication with the UAHPEC regarding this application should include this reference number: 9313.

(This is a computer generated letter. No signature required.)

UAHPEC Administrators
University of Auckland Human Participants Ethics Committee

cc: Head of Department / School, Marketing
Ms Jennifer Young

Additional Information:
- Do not forget to fill in the ‘approval wording’ on the Participant Information Sheets and Consent Forms, giving the dates of approval and the reference number, before you send them out to your participants.
- Should you need to make any changes to the project, write to the UAHPEC Administrators by email (humanethics@auckland.ac.nz) giving full details of the proposed changes including revised documentation.
- At the end of three years, or if the project is completed before the expiry, please advise UAHPEC of its completion.
- Should you require an extension, write to UAHPEC by email before the expiry date, giving full details along with revised documentation. An extension can be granted for up to three years, after which a new application must be submitted.
- If you have obtained funding other than from UniServices, send a copy of this approval letter to the Manager - Funding Processes, UOA Research Office. For UniServices contracts, send a copy of the approval letter to the Contract Manager, UniServices.
- Please note that UAHPEC may from time to time conduct audits of approved projects to ensure that the research has been carried out according to the approval that was given.
Appendix B: Study 1-Pilot Details

This pilot study was conducted to examine the performance of measures in the Study 1 questionnaire, to check the flow and eliminate where possible potential sources of error before on-line fieldwork.

Specific objectives were:
- to check participant understanding of the two health and wellness concepts.
- to ensure the satiety concept generated a range of believability rating responses and that these ratings were significantly different to ratings for the control concept.
- to check the overall flow and general understanding of the questions.
- to uncover any additional information that would assist the design of the study.

42 self-completion interviews were completed by a convenience sample of women from Plant and Food Research staff, University of Auckland colleagues, and personal contacts. Where possible participants were debriefed after the completion of the questionnaire and asked to explain their understanding of the concept and meaning of each question.

Pilot limitations:
- The majority of participants matched the criteria for inclusion in the planned sample (Over 35 years and currently trying to lose weight). However, some not trying to lose weight did partake and tended to indicate lower believability scores.
- It was a self-completion paper survey.

Key Findings of Pilot Study:
- The mean believability rating (4.38) for the satiety concept (Bs) was significantly different (to the mean rating (6.44) for the control concept (Bc).
  \[ t(41) = 18.56, p < .0001 \] (also signif. for Mann-Whitney U).
- The mean believability rating (4.38) for the satiety concept (Bs) was significantly different to the mean Personal Believability (Pbm) rating (3.98), \[ t(41) = 18.54, p < .0001 \].
- Believability (Bs) and Intention to Try (ITT) measures for the Satiety concept were not strongly correlated (Spearmans r = .30, not sig.)
- The 9 personal believability measures - Cronbach’s alpha score for the 9 items=.936
- Of the 14 participants who indicated high Believability for the satiety concept (scored in the 2 top boxes) all but 2 selected “I’m Hopeful that it will work” rather than “I Definitely Believe that it will work”.
- New information had an effect on perceived believability levels. “The clinically proven to work” statement was rated “I believe the original statement more now” by 58% of all participants, with “Special extract found in fruit and vegetables” rated in this way by 36%. Interestingly, participants who originally rated the believability (B) in the top 3 boxes were more likely to say they “believed the statement more now” across both statements than those giving a lower original rating.

Suggested Changes to the Questionnaire:
- Overall both the concepts (satiety and control) were understood, although in a few cases there was confusion about whether or how the benefit would be ‘contained’ in the product. The control concept needs to be reworded and lengthened to match the satiety concept in its language and tone. The control concept was viewed as being more directly factual and in a different style to the satiety concept.
• Reduce the personal believability measures for the satiety concept to 7 items by removing e) “solves a problem for me” and f) “gives me more time to focus on other things in life”. These were viewed by participants as vague and hard to interpret.

• Measures of ‘Agreement with’ the concept need to be added. It is possible for someone to believe that something will work, but they may not accept or like the process and this is currently not measured in the questionnaire.

• Add ethnic grouping as another covariate that potentially affects believability

• Include measures from the Food Cravings Questionnaires to differentiate between successful and unsuccessful dieters (as validated in latest issue of Appetite vol 58, 2012)

Pilot Study Results

1. Satiety Concept Evaluation

Open Ended Responses: Participants were asked to describe their initial thoughts after reading the concept statements. This question was included to gauge initial reactions to the concept, and in particular to see if a believability evaluation reaction occurs without any prompting.

Table 1- Frequency of coded responses by believability rating in Q2.2

<table>
<thead>
<tr>
<th>Positive Comment</th>
<th>Negative Comment</th>
<th>Other Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 3 boxes N=23</td>
<td>Sounds good/ great / Great idea/ promising/ agree with (6) Interesting intriguing /curious about (4) Want to Try (2) Will work for some people (2) Logical/Makes sense (2) Plausible/logical (2) Gives control (1) Will work for me (1) I do this already (1)</td>
<td>Concern about additives/side effects (4) Not natural (1) Sceptical (1) Don’t fully agree (1)</td>
</tr>
<tr>
<td>Neutral N=5</td>
<td>Bring it on (1) Sounds good/ promising (2)</td>
<td>Hard to relate to (1)</td>
</tr>
<tr>
<td>Bottom 3 boxes N=14</td>
<td>Too idealistic/ too good to be true/ too far-fetched/ Hard to relate to (5) Manufactured, not natural (1) Not good for me(1) Sceptical (1)</td>
<td>Over eat because of other factors not just hunger (mood, comfort, taste, stress, habit) (3) How quickly do you get full? (1) Only way is too eat less (1) If I don’t feel fuller may end up with same calories (1) Same as other schemes (1)</td>
</tr>
</tbody>
</table>

One common response (mentioned by 11 participants) was reference to ‘overeating due to other factors not just hunger’ and this was viewed as a problem which would not be addressed by the benefits of the proposed range.

2. Personal Believability Ratings (PB)

10 scale items were originally evaluated to tap personal believability. (These were adapted from the Theory of Trying (Bagozzi and Warshaw 1990) and the Health Belief Model.

Item PBi “A food or beverage with this benefit is too good to be true” has been removed from the analysis of PB measures. It relates to general scepticism and in retrospect should not have been included in the PB measures.
Table 2 Summary Statistics for Personal Believability Measures

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<th>Summary statistics:</th>
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<td>Variable</td>
<td>N</td>
<td>Min</td>
<td>Max</td>
<td>Mean</td>
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<td>a) Will work for me</td>
<td>42</td>
<td>1.000</td>
<td>7.000</td>
<td>4.333</td>
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<tr>
<td>b) Will help me to lose weight</td>
<td>42</td>
<td>1.000</td>
<td>6.000</td>
<td>4.167</td>
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<td>c) Will have many advantages for me</td>
<td>42</td>
<td>1.000</td>
<td>7.000</td>
<td>4.071</td>
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<td>d) Overcome barriers</td>
<td>42</td>
<td>1.000</td>
<td>7.000</td>
<td>4.024</td>
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<td>e) Solves a problem</td>
<td>42</td>
<td>1.000</td>
<td>7.000</td>
<td>3.643</td>
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<td>f) More time to focus</td>
<td>42</td>
<td>1.000</td>
<td>6.000</td>
<td>3.071</td>
</tr>
<tr>
<td>g) I will feel in control</td>
<td>42</td>
<td>1.000</td>
<td>6.000</td>
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<td>h) Expect a good outcome</td>
<td>42</td>
<td>1.000</td>
<td>7.000</td>
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<tr>
<td>i) Fits in with my ideas</td>
<td>42</td>
<td>1.000</td>
<td>7.000</td>
<td>3.714</td>
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Cronbach's alpha: 0.936

3. Change in Believability Levels from Introduction of New Information

a) Clinically proven to work

<table>
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<tr>
<th>Believability Rating</th>
<th>Total</th>
<th>Top 3 boxes</th>
<th>Neutral</th>
<th>Bottom 3 boxes</th>
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<tr>
<td>Believe more now</td>
<td>23</td>
<td>15 (65%)</td>
<td>2 (40%)</td>
<td>6 (50%)</td>
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<tr>
<td>No Change</td>
<td>16</td>
<td>8 (35%)</td>
<td>3 (60%)</td>
<td>5 (42%)</td>
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<td>Believe less now</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1 (8%)</td>
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<td>No. of Responses</td>
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<td>23</td>
<td>5</td>
<td>12</td>
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3. Change in Believability Levels from Introduction of New Information

b) Special extract found in Fruit and Vegetables

<table>
<thead>
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<th>Neutral</th>
<th>Bottom 3 boxes</th>
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<td>Believe more now</td>
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<td>15 (65%)</td>
<td>2 (40%)</td>
<td>2 (16%)</td>
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<tr>
<td>No Change</td>
<td>22</td>
<td>8 (35%)</td>
<td>2 (40%)</td>
<td>8 (67%)</td>
</tr>
<tr>
<td>Believe less now</td>
<td>3</td>
<td>-</td>
<td>1 (20%)</td>
<td>2 (16%)</td>
</tr>
<tr>
<td>No. of Responses</td>
<td>39</td>
<td>22</td>
<td>5</td>
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### FINAL QUESTIONNAIRE: v12

**Job number:** 649913928  
**Job name:** New Health and Wellness Claims  
**Project Manager(-s):** Yasu  
**Programmer(-s):** Mani  
**Data Processing:**

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#### Additional Details

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### Appendix C

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**Interlocking -**

- **Age**
- **Education**
- **Location**

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Appendix C

Consumer Responses to New Health and Wellness Claims
On-Line Questionnaire

Initial Screening Section-TO DETERMINE ELIGIBILITY FOR THE STUDY

We would like to invite you to participate in our survey. This survey is intended for a certain group of participants and we need to firstly ask some questions to see if you qualify.

Please answer the following qualification questions:

Q.S.1 Please indicate your gender:
   1. Male => Thanks and END
   2. Female => CONTINUE

Q.S.2 Can you please tell me if you or anyone in your immediate family work for any of the following places?
   1. Food Manufacturer
   2. Food Wholesaler
   3. Food Distributor
   4. Advertising Agency
   5. Market Research Company
   6. Food Related Government Agency
   7. None of the above => CONTINUE

Q.S.3 And can you please tell me if you have participated in an online market research study for a food or beverage product in the past 3 months?
   1. Yes => Thanks and END
   2. No => CONTINUE

Q.S.4 Are you currently attempting to lose weight?
   1. Yes => CONTINUE
   2. No => Thanks and END

Q.S.5 In your own view, which of the following 3 statements best sums up how much weight you are currently trying to lose?
   1. I am currently attempting to lose a small amount of weight
   2. I am currently attempting to lose a moderate amount of weight
   3. I am currently attempting to lose a large amount of weight

Q.S.6 Which of the following categories best describes your AGE?
   1. Under 35 years = Thanks and END
   2. 35-44 years => CONTINUE
   3. 45-54 years
   4. 55-64 years
   5. 65 years or older = Thanks and END

Q.S.7 Can you please tell me the last level of EDUCATION that you completed?
   1. Some high school or less
   2. Completed high school
   3. Some University or College
   4. Graduated University or College
Q.S.8 Is your combined household’s gross annual INCOME, more than $30,000 AUD?

1. No = Thanks and end
2. Yes = CONTINUE

Q.S.9 Which of the following areas do you live in?

1. Metropolitan Sydney
2. Metropolitan Melbourne
3. Metropolitan Brisbane
4. Metropolitan Adelaide
5. Other

Please continue to Section 1, the Participant Information Sheet and Consent Form section (see attached information sheets)

SECTION 1 SCREENING AND CONSENT

(Please see attached: Participant Information Sheet (Revised) and Consent Form)

SECTION 2 CONCEPT 1 EVALUATION

Section 2: You are now ready to commence the survey.

Please read the following description and then answer the questions about it. This concept will remain on your screen for you to refer back to for the relevant questions.

LOOKING FOR AN EASIER WAY TO CONTROL YOUR EATING?

In today’s world, where food and drink comes fast and easy, it’s understandable that weight control has become a challenge for many people. To control your weight you usually have to adjust the balance between the amount of energy you consume and the amount you use physically. This may involve watching the types of foods and beverages you consume as well as the amount. Often, however, you are left feeling hungry and unsatisfied. Even with your best efforts, you end up snacking on the wrong types of food, and/or over-eating.

But, managing your hunger and losing weight doesn’t need to be impossible. A new range of everyday foods and drinks will soon be available to help make it easier for you to keep hunger at bay and to control your weight.

The range will include breads, cereals, margarine, yoghurts, cheeses, milk and other drinks. These products will help you to consume less through the day because they are designed to satisfy your appetite more quickly and to keep your hunger at bay for longer. Less hunger and a greater sense of fullness from a smaller portion, puts you in charge of when and how much you want to eat.

The benefit for you is convenient, longer lasting control over your hunger, so you can stay on track and achieve your weight-control goals.
Q.2.1 Please indicate on the scale below your responses to the following questions:

Q.2.1a How believable is a food or drink product with this benefit?
1. Not at all believable    7. Very believable

Q.2.1b How credible is a food or drink product with this benefit?
1. Not at all credible    7. Very credible

Q.2.1c How trustworthy is a food or drink product with this benefit?
1. Not at all trustworthy    7. Very trustworthy

Q.2.2 And please indicate your level of agreement/disagreement with the following statements:

Q.2.2a A food or drink product with this benefit fits in with my personal beliefs
1. Don’t agree at all    7. Agree very strongly

Q.2.2b A food or drink product with this benefit sounds “too good to be true”
1. Don’t Agree at all    7. Agree very strongly

Q.2.3 From what you have read, please indicate on the scale below the position that best reflects how much you believe the following statements.

Q.2.3a) A food or drink product with this benefit will work for me
1. Don’t believe at all    7. Believe very strongly

Q.2.3b) A food or drink product with this benefit will help me to lose weight
1. Don’t believe at all    7. Believe very strongly

Q.2.3c) A food or drink product with this benefit will have many advantages for me
### Q.2.3d) A food or drink product with this benefit will help me to overcome some of the barriers that I face at the moment with weight loss

<table>
<thead>
<tr>
<th>1. Don’t believe at all</th>
<th>7. Believe very strongly</th>
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### Q.2.3e) I will feel in control if I try a food or drink product with this benefit

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<th>1. Don’t believe at all</th>
<th>7. Believe very strongly</th>
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### Q.2.3f) I expect a good outcome if I try a food or drink product with this benefit

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<th>1. Don’t believe at all</th>
<th>7. Believe very strongly</th>
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### Q.2.3g) A food or drink product with this benefit fits in with my ideas about weight loss

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<th>1. Don’t believe at all</th>
<th>7. Believe very strongly</th>
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Which one of the following statements best describes your feelings about trying the food or drink with the new benefit?

1. I will definitely try it
2. I might try it
3. I might or might not try it
4. I probably won’t try it
5. I definitely won’t try it

### Q.2.5

Which one of the following statements best describes your feelings about a food or drink with the new benefit?

1. I definitely believe it will work for me
2. I’m hopeful that it will work for me
3. I’d like to believe it will work for me but I’m not sure
4. I’m not hopeful that it will work for me
5. I definitely don’t believe it will work for me

### SECTION 3 AFFECTIVE SEMANTIC DIFFERENTIALS

Q 3.1. Please indicate a position along the scales below that reflects how you feel now after reading the description and learning about this new benefit
SECTION 4 ADDITIONAL STATEMENTS – EFFECT ON BELIEVABILITY

Q.4.1 You will now see two new statements giving you more information about the original description. After you read each new statement please indicate how it affects your level of believability about the benefit.

Q.4.1a) The benefit has been clinically proven to work

1. I believe the original description more now
2. I believe the original description less now
3. No change in my level of believability

Q.4.1b) The products in the range include features naturally found in fruit and vegetables

1. I believe the original description more now
2. I believe the original description less now
3. No change in my level of believability
**SECTION 5 – EVALUATION OF CONTROL STATEMENT**

Please now read the following description about weight control guidelines.

**HEALTHY EATING GUIDELINES THAT WORK BEST**

Losing weight and keeping it off is all about following a healthy lifestyle. There are many diets on offer, but these are often hard to keep to and, in some cases, they are just plain unhealthy.

The best way to lose weight is to focus on a healthy food plan that you can commit to over a long period. This means eating plenty of vegetables, whole grains, low-fat milk and lean meats. These give your body the right nutrients and help you to resist overeating. Eating mainly these types of foods or beverages everyday provides you with a balanced diet containing protein and fibre to keep you feeling full and healthy.

The occasional treat is alright, but it is best to reduce foods which contain added sugar and fats. Some daily exercise is also a good idea to enhance the feeling of wellbeing and to keep your body working well. It is recommended that a minimum of thirty minutes of physical activity be included each day for an adult (for example, walking or cycling).

Overall, these sensible, healthy eating guidelines combined with an active lifestyle offer the best way to succeed with your weight control targets. These are the current recommendations of nutrition and health experts.

**Q.5.1 Please indicate on the scale below your responses to the following questions:**

**Q.5.1a How believable are these guidelines to you?**

1. Not at all believable

2. Not believable

3. Slightly believable

4. Somewhat believable

5. Moderately believable

6. Mostly believable

7. Very believable

**Q.5.1b How credible are these guidelines to you?**

1. Not at all credible

2. Not credible

3. Slightly credible

4. Somewhat credible

5. Moderately credible

6. Mostly credible

7. Very credible

**Q.5.1c How trustworthy are these guidelines to you?**

1. Not at all trustworthy

2. Not trustworthy

3. Slightly trustworthy

4. Somewhat trustworthy

5. Moderately trustworthy

6. Mostly trustworthy

7. Very trustworthy

**Q.5.1d And please indicate your level of agreement/disagreement with the following statement**

These guidelines fit in with my personal beliefs

1. Don’t agree at all

2. Don’t agree strongly

3. Somewhat don’t agree

4. Mildly don’t agree

5. Agreed

6. Agreed strongly

7. Agree very strongly
SECTION 6 HOPEFULNESS IN REACHING GOALS AND SELF EFFICACY
The following questions will give us valuable background information about your opinions and your life style:

Q. 6.1 Please indicate your level of agreement/ disagreement with the following statements?

Q. 6.1a) I usually succeed when I focus on my weight goals
1. Disagree strongly 7. Agree strongly

Q. 6.1b) No matter how much effort I put into dieting, my weight tends to stay about the same
1. Disagree strongly 7. Agree strongly

Q. 6.2 How hopeful are you that you will achieve your weight loss goal in the next 3 months

1. Not very hopeful at all 7. Very hopeful

Q. 6.3 Are you using physical activity or exercise to lose weight?

1. Yes 2. No

Q. 6.4 Are you trying to eat less to lose weight?

1. Yes 2. No

Q. 6.5 Have you ever experienced difficulties in losing weight?
1. Yes -> Continue
2. No -> GO TO Q. 7

Q. 6.6 There are many reasons that make it difficult for people to meet their weight goals. Please read through the list below, and indicate the main reasons that you feel make it difficult for you to lose weight.

1. I like to snack between meals
2. I feel tired and shaky if I don’t eat enough
3. I often eat when I am not hungry due to boredom or my mood
4. I often eat when I am not hungry due to stress
5. I find it difficult to resist sweet things and /or treats
6. I drink too much alcohol
7. I can diet for a short time but then I go back to my old habits
8. I eat because I like the taste of food
9. I eat without really thinking about it
10. I start eating something and then I can’t stop until its finished
11. My family routine makes it difficult to achieve my weight loss plans
12. I don’t have time to plan and prepare the right foods
13. I don’t do enough exercise
14. I use a lot of convenience foods which are often less healthy
15. I get hungry when I am trying to lose weight
16. Are there any other reasons not listed here that you would like to add?
SECTION 7: FOOD NEOPHOBIA

Q.7. Please indicate your level of agreement/disagreement with the following statements about food in general

Q.7a) I don’t trust new foods

1. Disagree strongly

2. Strongly disagree

3. Somewhat disagree

4. Neither agree nor disagree

5. Somewhat agree

6. Strongly agree

7. Agree strongly

Q.7b) I am constantly sampling new and different foods

1. Disagree strongly

2. Strongly disagree

3. Somewhat disagree

4. Neither agree nor disagree

5. Somewhat agree

6. Strongly agree

7. Agree strongly

Q.7c) I am afraid to eat things I have never had before

1. Disagree strongly

2. Strongly disagree

3. Somewhat disagree

4. Neither agree nor disagree

5. Somewhat agree

6. Strongly agree

7. Agree strongly

Q.7d) If I don’t know what is in a food, I won’t try it

1. Disagree strongly

2. Strongly disagree

3. Somewhat disagree

4. Neither agree nor disagree

5. Somewhat agree

6. Strongly agree

7. Agree strongly

Q.7e) I like foods from different countries

1. Disagree strongly

2. Strongly disagree

3. Somewhat disagree

4. Neither agree nor disagree

5. Somewhat agree

6. Strongly agree

7. Agree strongly

Q.7f) I am very particular about the foods I will eat

1. Disagree strongly

2. Strongly disagree

3. Somewhat disagree

4. Neither agree nor disagree

5. Somewhat agree

6. Strongly agree

7. Agree strongly

Q.7g) I will eat almost anything

1. Disagree strongly

2. Strongly disagree

3. Somewhat disagree

4. Neither agree nor disagree

5. Somewhat agree

6. Strongly agree

7. Agree strongly

SECTION 8 FUNCTIONAL FOOD EVALUATION

Please now read the following statement about another group of food and wellness products

For many people the link between what we eat and our health is becoming more and more important. All foods contain basic nutrients that provide us with energy, but there is now a lot more interest in learning about the role of special components found in fruits, vegetables and cereal grains. These can improve our health and wellness and may even help reduce the risk of disease.

Over the past few years new health and wellness food products which make use of these compounds have been introduced into our food and grocery stores. They are called functional foods.

“Functional Foods” provide extra health and wellness benefits in addition to their nutritional value. To be called a functional food, the food must be fortified with additional compounds and have an added ‘function’ that it provides for the body. (Please note: items such as low-fat, low-salt, low-calorie foods, capsules and vitamin tablets are NOT regarded as functional foods)
Examples of functional foods are:

- Margarine spreads with plant sterols to lower cholesterol
- Yoghurt with probiotics for digestive health
- Orange Juice with calcium for bone health
- Bread fortified with folic acid for female reproductive health

Functional foods promote better health and help reduce the risk of disease by helping the body in specific areas.

Q. 8 Please indicate your level of agreement/disagreement with the following statements

Use wording anchors for each (a-i):

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

Q. 8a) I know a lot about functional foods

1. Disagree Strongly 7. Agree Strongly

Q. 8b) I can prevent disease by eating functional foods regularly

1. Disagree Strongly 7. Agree Strongly

Q. 8c) I am prepared to compromise on the taste of a food if the product is functional

1. Disagree Strongly 7. Disagree Strongly

Q. 8d) Functional foods are completely unnecessary

1. Disagree Strongly 7. Agree Strongly

Q. 8e) For a healthy person functional foods are worthless

1. Disagree Strongly 7. Agree Strongly

Q. 8f) I believe that functional foods fulfil their promises

1. Disagree Strongly 7. Agree Strongly

Q. 8g) Functional foods promote my well-being

1. Disagree Strongly 7. Agree Strongly

Q. 8h) Using functional foods is completely safe

1. Disagree Strongly 7. Agree Strongly

Q. 8i) Exaggerated information is given about the health effects of functional foods

1. Disagree Strongly 7. Agree Strongly
### SECTION 9 PERSONALITY MEASURES

Q.9 Please indicate your level of agreement/disagreement with the following statements

| Q.9a | I see myself as someone who is reserved | 1. Disagree Strongly | 7. Agree Strongly |
| Q.9b | I see myself as someone who is generally trusting | 1. Disagree Strongly | 7. Agree Strongly |
| Q.9c | I see myself as someone who tends to be lazy | 1. Disagree Strongly | 7. Agree Strongly |
| Q.9d | I see myself as someone who is relaxed, handles stress well | 1. Disagree Strongly | 7. Agree Strongly |
| Q.9e | I see myself as someone who has few artistic interests | 1. Disagree Strongly | 7. Agree Strongly |
| Q.9f | I see myself as someone who is outgoing, sociable | 1. Disagree Strongly | 7. Agree Strongly |
| Q.9g | I see myself as someone who tends to find fault with others | 1. Disagree Strongly | 7. Agree Strongly |
| Q.9h | I see myself as someone who does a thorough job | 1. Disagree Strongly | 7. Agree Strongly |
| Q.9i | I see myself as someone who gets nervous easily | 1. Disagree Strongly | 7. Agree Strongly |
| Q.9j | I see myself as someone who has an active imagination | 1. Disagree Strongly | 7. Agree Strongly |
| Q.9k | I see myself as someone who is an optimist | 1. Disagree Strongly | 7. Agree Strongly |
Appendix C

Q.9 I see myself as someone who
---believes most things I read
  1. Disagree Strongly
  2. Disagree Moderately
  3. Disagree
  4. Neutral
  5. Agree
  6. Agree Moderately
  7. Agree Strongly

Q.9m) I see myself as someone who
---is decisive
  1. Disagree Strongly
  2. Disagree Moderately
  3. Disagree
  4. Neutral
  5. Agree
  6. Agree Moderately
  7. Agree Strongly

SECTION 10 INVOLVEMENT and SUBJECTIVE KNOWLEDGE OF WEIGHT LOSS METHODS
Q.10 And finally, please indicate your level of agreement/disagreement with the following statements.
Q.10a) I know a lot about weight loss methods
  1. Disagree Strongly
  2. Disagree Moderately
  3. Disagree
  4. Neutral
  5. Agree
  6. Agree Moderately
  7. Agree Strongly

Q.10b) Among my circle of friends, I’m one of the “experts” on weight loss methods
  1. Disagree Strongly
  2. Disagree Moderately
  3. Disagree
  4. Neutral
  5. Agree
  6. Agree Moderately
  7. Agree Strongly

Q.10c) I have heard of most of the new weight loss methods that are available
  1. Disagree Strongly
  2. Disagree Moderately
  3. Disagree
  4. Neutral
  5. Agree
  6. Agree Moderately
  7. Agree Strongly

Q.10d) Achieving my weight goal is very important to me
  1. Disagree Strongly
  2. Disagree Moderately
  3. Disagree
  4. Neutral
  5. Agree
  6. Agree Moderately
  7. Agree Strongly

SECTION 11 BACKGROUND QUESTIONS
Q.11 Many thanks for completing this survey. Can you please take a moment to answer the following questions for classification purposes. If you would prefer not to answer any of the questions, please leave them blank.
Q.11.1 What is your current height in either (please select one)? ___cms or ______ feet and inches

[ ] Prefer not to answer

Q.11.2 Would you mind telling us approximately your current weight (in kg’s or pounds)? ___ kgs or ____ lbs

[ ] Prefer not to answer

Q.11.3 Ideally, how much would you like to weigh (in kg’s or pounds)? _________ kgs or ______ lbs

[ ] Prefer not to answer

Q.11.4 Which of the following best describes your marital status?
  1. Single
  2. Married
  3. Divorced
  4. Widowed
  5. Separated
  6. Living with partner/significant other

Q.11.5 How many people, including yourself, currently reside in your household?
  1. 1
  2. 2
  3. 3
Q11.7 Which of the following best describes your household’s gross annual INCOME?
1. $30,000 to less than $60,000 AUD
2. $60,000 to less than $100,000 AUD
3. $100,000 to less than $150,000 AUD
4. $150,000 to less than $200,000 AUD
5. $200,000 AUD or more
6. Prefer not to answer

Q11.8 What is your ancestry? You may choose more than one.
1. Aboriginal
2. Australian
3. Other Oceanian
4. North West European
5. South East European
6. North African and Middle Eastern
7. South East Asian (e.g. Vietnamese, Filipino, Indonesian)
8. North East Asian (e.g. Chinese)
9. Southern and Central Asian (e.g. Indian)
10. North American
11. South American
12. African
13. Torres Strait Islander
14. Other
15. Prefer not to say

Many Thanks for your time and the information that you have provided for this study. It is greatly appreciated.
## Appendix D

### Appendix D: Bivariate Correlation Matrix of Independent Variables

<table>
<thead>
<tr>
<th>Weight Goal Importance</th>
<th>Perceived Self Efficacy</th>
<th>Subjective Weight Loss</th>
<th>Attitudes to Functional Foods</th>
<th>Knowledge of Diet Methods</th>
<th>Believe most things I read</th>
<th>See myself as lazy</th>
<th>See myself as trusting</th>
<th>Prior difficulty losing weight</th>
<th>Hopefulness of losing weight</th>
<th>Education</th>
<th>Perceived Control over Weight Loss</th>
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<td>-0.04</td>
<td>601</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Hopefulness of losing weight</td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.262</td>
<td>.375</td>
<td>-0.090</td>
<td>601</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Education</td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>-0.004</td>
<td>0.021</td>
<td>-0.135</td>
<td>601</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Perceived Control over weight loss</td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
<td>N</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>0.026</td>
<td>-0.090</td>
<td>-0.078</td>
<td>601</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td>.000</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed). Correlation is significant at the 0.05 level (2-tailed).**
Appendix E: Study 2 – Preliminary Interviewer Guide

The following provides a loose structure of the type of questions to be pursued throughout the interview, with suggestions for prompts if required. The aim is to encourage the participant to talk freely and fully.

i) Introduction
Hi (.........)

As I mentioned the interview will take about an hour, and we are going to discuss a range of different and interesting topics. Please feel free to openly discuss your own thoughts, there are definitely no right or wrong answers. The interview is a chance for your own thoughts and feelings to come forward in a completely confidential and safe environment. The aim is to ‘chat’ through areas that you know a lot about, but that you might not have discussed with anyone in this way. I am sure you will find it interesting and thought-provoking. This study is about how people (women in particular) and we are interested in how you yourself go about losing weight, for example, what you think and feel about it. We will also look at a new idea in the weight management area.

ii) Opening Conversation (10-20 mins)
The initial conversation discusses food and current family and personal eating habits. This is unstructured and will allow the participant to specifically discuss their most recent (yesterday, today) thoughts, experiences and daily routines around food. (Further probe on mentions of hunger)
Possible areas of probing:
What are your favourite foods? Do you tend to buy the same things every week? Do you have a set plan? Do you buy different things for yourself than your other family members? Do you like to try new foods? Do you get hungry?

iii) Weight Loss Experiences (10-15 mins)
“As you know already, you have been selected to take part today as you indicated that you are currently attempting to lose some weight at this time.

Possible areas of probing (If necessary):
Can you please tell me about what you are doing at the moment, some of the ways you have tried, or are trying to lose weight? What do you believe works best for you?
Often people find it very difficult to meet their weight goals. Can you tell me if you have found it difficult at all? If yes, what reasons do you think make it difficult.
How hopeful are you that you will reach your weight loss goals? Do you feel in control?
Amongst your friends do you feel you know a lot about the different methods available?
How important is it to you to reach your goals? Why do you really want to lose weight?
Why do you think people are putting on more weight today than they were say 20-30 years ago?
Is it harder for women in particular to lose weight? Is it harder as we get older?

iv) Satiety Concept (20-30mins)
The satiety benefit concept description (from study 1) is shown.

“Please now read this statement and tell me your immediate thoughts about it as they come to mind, anything at all. Please take as long as you need to read it and feel free to re-read it as we talk about it”.
The participant is encouraged to talk about it initially in their own terms. “so, what are your initial thoughts”. The conversation is open, more description of the concept if required.
Prompts (if necessary)
Do you find this concept/ benefit believable?
Appendix E

Does it sound like an idea you would trust? Does it fit in with your beliefs about how to lose weight? Do you think you would try products from this range if they were available? Do you think they would work for you? How hopeful are you that they would work? Reasons for coming to these decisions, Why do you think they would work / not work for you? What are some of the reasons that you can think of that make you find this description believable /unbelievable? 

You mentioned that you would like to try the products in the description, are there any that appeal to you more than the others?

If I added that the product range was “clinically proven to work” would you find the statement more believable?

Once conversation stops begin breaking down aspects, e.g.” lets look at this in a little more detail”. Using an example from a specific food they eat (e.g. bread, yoghurt, cereal) “Do you believe that it is possible that added ingredients in (a food) will be able to make you feel fuller?” Probe reasons

If Yes, “How long is it believable for? “And do you then believe this will help you lose weight? ……………………in the longer term as well?”

Possible Projective Questions:
How do you think other people would react to this concept?
What sort of person would be likely to believe this concept?
Can you think of any reasons why some people might believe/disbelieve the benefit?
What do you think nutritionists or dieticians might think of such a range of products?

vii) Functional Foods Discussion if time allows
Several currently available functional food products will be presented for open discussion if time allows.

vii) Conclusion
The participant is invited to share thoughts and feelings about any aspect of the interview prior to the interview’s conclusion. To conclude the interviewer will attempt to summarise the key points of the interview, particularly on the satiety concept. This will provide the participant with a final chance to expand or clarify any points. They will then be thanked for their time, given their payment and provided them with the interviewer’s contact details. For snowballing, interviewer to ask if there is anyone they know who would like to participate in the Study.
### The Purists

<table>
<thead>
<tr>
<th>Participant Occupation</th>
<th>Age</th>
<th>Personal Values Functional Foods</th>
<th>Perceived Self Efficacy re weight loss</th>
<th>Challenges / Motivation</th>
<th>Believability Response</th>
<th>Intention to Buy/Try</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natalie Mum/ Part time Script writer</td>
<td>30</td>
<td>Anti-food corporates, Anti-Functional foods, seen as a con adding health claims to unhealthy processed foods</td>
<td>High, due to knowledge and focus on whole foods</td>
<td>Was overweight as a teenager Now a food purist Avoidance of being fat</td>
<td>Doesn’t contemplate Seeking authenticity Intolerant due to wider moral incompatibility with food processing and cynicism of food industry</td>
<td>Never, only for sad chubby people Does not fit present identity</td>
</tr>
<tr>
<td>Janice Office worker/ Food Blog Writer</td>
<td>58</td>
<td>Holistic natural Altruistic, Anti-science understands satiety principles</td>
<td>Moderate, tempted by tasty foods</td>
<td>Appearance / Health Approach towards - Smaller dress size</td>
<td>Possible</td>
<td>Yes, would just try, as likes to try new things like to look better in clothes</td>
</tr>
<tr>
<td>Emma Electronic Engineer</td>
<td>36</td>
<td>Natural, not processed Knowledge is power, values nutrition and exercise</td>
<td>Normally high but been on the pill and changed her metabolism</td>
<td>Confidence issues, values Approach appearance due to workplace male dominated environment, sees power in thinness</td>
<td>Believable Possible to fill up with, sees the value</td>
<td>Would definitely try it as long as all ingredients on the label</td>
</tr>
</tbody>
</table>

### The Pragmatists

<table>
<thead>
<tr>
<th>Participant Occupation</th>
<th>Age</th>
<th>Personal Values Functional Foods</th>
<th>Perceived Self Efficacy re weight loss</th>
<th>Challenges / Motivation</th>
<th>Believability Response</th>
<th>Intention to Buy/Try</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leanne Graphic Designer</td>
<td>54</td>
<td>Traditional, kiwi values, sensible approach works best/ needs to see the benefit for self</td>
<td>Hunger not viewed as a problem</td>
<td>Come to body/self-acceptance A sceptic of marketing claims, mentions, appearance at length Avoidance of being big</td>
<td>DK, Wants to make an informed choice</td>
<td>Would sceptically give it a go Despite concerns over processing</td>
</tr>
<tr>
<td>Maria Insurance Broker</td>
<td>52</td>
<td>Self-reliance</td>
<td>High knowledge and strong self-efficacy</td>
<td>Family centred, health and exercise conscious-Approach focus</td>
<td>Would need to try first</td>
<td>Would try to see what would happen</td>
</tr>
</tbody>
</table>
## Appendix G

### The Hedonists

<table>
<thead>
<tr>
<th>Participant Occupation</th>
<th>Age</th>
<th>Personal Values</th>
<th>Functional Foods</th>
<th>Perceived Self Efficacy re weight loss</th>
<th>Challenges/ Motivations</th>
<th>Believability Response</th>
<th>Intention to But/Try</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cindy</td>
<td>34</td>
<td>Appearance</td>
<td>Low</td>
<td>attributed her issues to external forces</td>
<td>Social lifestyle around drinking Health and appearance Avoidance</td>
<td>Don’t know</td>
<td>Doesn’t see how would fit lifestyle We all want a quick fix, but it is a long haul</td>
</tr>
<tr>
<td>Mary</td>
<td>62</td>
<td>Taste of food important</td>
<td>Can diet as needed for special event, but then loses momentum</td>
<td>Lacking in motivation, doesn’t want hassles</td>
<td>Thought it sounded great, but in terms of believing, didn’t know need to try</td>
<td>Would try if taste was not affected Half hearted, definitely on a friends recommendation</td>
<td></td>
</tr>
<tr>
<td>Jude</td>
<td>58</td>
<td>pragmatic</td>
<td>Medium</td>
<td>Health Focus Approach</td>
<td>Sees as viable, would have to try it out though</td>
<td>Yes, would give it a go</td>
<td></td>
</tr>
<tr>
<td>Gina</td>
<td>55</td>
<td>Kiwi values, sees FF as odd,</td>
<td>Low, sweet tooth struggles with staying motivated</td>
<td>Low ability to adhere, Appearance- avoidance</td>
<td>Don’t know until try, “proof is in the pudding”</td>
<td>No, not really for her</td>
<td></td>
</tr>
</tbody>
</table>

### The Emotional Eaters

| Rita                    | 61  | Finding Balance, | Low, Long term challenge was explored in detail | Significant issues with food, giving up- Avoidance , experience of Weight Stigma | Wants to believe, but is doubtful due to own past | Yes, willing to give it a go, very reluctantly but not confident |
| Rosemary                | 58  | Fear of technology | Low self-efficacy, self-confessed emotional eater, very involved | High goal importance, low amount of weight to lose Appearance driven avoidance | Considers it possible Don’t Know, “proof is in the pudding”, sceptical and wants to believe, unsure of how would work re cravings | Interested but unlikely for self (like stomach stapling too much control).Want to know how manufactured. Sees broader need for helping obese people |
| Kris                   | 58  | Anti-additives due to health issues | Low self-efficacy, and high interest and past involvement with dieting | Classic restrained eater, Appearance and health driven - Avoidance Overriding signals | Would like to believe wants the magic, but rationalises about the role of the mind and how to control it | Possibly, wants as part of an overall digestive/ health product |
| Lydia                  | 44  | Anti-processed foods | Now has gym focus, has strict control strategies in place, but still prone to binging | Classic binge eater, aware of frailties around food Health motivated focus | Not sure | Possibly not would depend on how processed they were |
| Miranda                | 39  | Altruistic for family and fears for extended family | Variable, has had periods of strength | Unique cultural pressures present an extra dimension of challenge | Unsure | Maybe depends on price, but not congruent with cultural norms |
Appendix H: Study 3 – Preliminary Interviewer Guide

Repertory Grid Technique - Pilot Interview Protocol

The study is about
- understanding how women think about weight loss, and activities that they may use
- many different ways of going about it
- want to see how they view a new weight loss idea (which I will be introducing to you in more detail, soon)

Important to: understand how women feel about different options, and what thoughts and feelings affect their choices. Consent Form details, Confidentiality, and can withdraw at any time. Audio tape only heard by me only as a reminder, own process, no right or wrong

1. Elements (15 mins)
We are going to talk very generally about the process of losing weight or maintaining weight and some of the different ways, you might consider trying, what works for you and what doesn’t. These methods are going to be the elements that we will use in building up our grid. These are your own set, everybody has very different way of building up, unique, interesting. I will give you some as well that you may have heard of, we will only use those that you are familiar with and can discuss. Then explain the Product Concept and the satiety benefit. Establish a product they eat regularly, this will be the final element (discuss and answer questions)

2. Then we will do the rep grid. Here is the sheet we will fill in together and this is your own unique ideas. I’ll explain it in detail as we go, but it involves comparing and contrasting the elements that you have decided as important to you. We will write each of the elements on a green card and put it into the top line of the grid.

3 Constructs
We will then go through a process of comparing groups of 3 of your elements with each other to develop ways in which you see them as similar and different. Just say what comes to mind, I will try to check with you that I have understood your differences. (present randomly, but ensure foods concept is rated)

“How are two of these elements similar and thereby different from the third”
In general to get started, and then, prompt for:
- believe will work for you
- helping you achieve your goal
- (Note order presented)

These will be our “constructs”, your ways of comparing the elements which we will discuss and try to isolate your ways of seeing, how you compare the different elements. Interviewer to note emergent pole and record once participant happy with it.

4. Preferred side: Need to understand your preferred side and what would you see as the opposite of this (not necessarily positive or negative). And understand why this is important to you? why the preferred pole for you? Preferred = Left side, then put into Grid

5. Element Rating
Finally, please rate each of the elements on where you see them fitting. If see them as extremely like this side, fits with this side = 1 (negative pole) to 7 (positive pole) fits with this other side .

6. De-brief and thanks, check for anyone else that could be a future participant.
### Appendix I: Study 3 Repertory Grid Raw Data

#### Original Grid (Jocelyn)

<table>
<thead>
<tr>
<th>Less Carbs</th>
<th>Less processed</th>
<th>More whole foods</th>
<th>Nutrilife drink</th>
<th>Atkins diet</th>
<th>Weight Watchers</th>
<th>Count calories</th>
<th>More exercise</th>
<th>Satiety Foods Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don't know what is in it/Altered</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>3.00</td>
<td>7.00</td>
<td>5.00</td>
<td>5.00</td>
<td>7.00</td>
</tr>
<tr>
<td>*Unknown / Risky</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>5.00</td>
<td>5.00</td>
<td>4.00</td>
<td>3.00</td>
<td>5.00</td>
</tr>
<tr>
<td>*Familiar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional</td>
<td>4.00</td>
<td>5.00</td>
<td>5.00</td>
<td>1.00</td>
<td>1.00</td>
<td>4.00</td>
<td>3.00</td>
<td>5.00</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not possible</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>1.00</td>
<td>3.00</td>
<td>2.00</td>
<td>3.00</td>
<td>5.00</td>
</tr>
<tr>
<td>*Possible for you</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Not satisfying</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>1.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>5.00</td>
</tr>
<tr>
<td>*Self Fulfilling- put your own self</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Original Grid (Kim)

<table>
<thead>
<tr>
<th>Weight Watchers</th>
<th>Jenny Craig</th>
<th>Less processed</th>
<th>More Fruit &amp; Veg</th>
<th>Low Gluten</th>
<th>High fruit juice diet</th>
<th>More exercise</th>
<th>Fast Diet 5:2</th>
<th>Coffee &amp; Cigarettes</th>
<th>Satiety Foods Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Too Restrictive</td>
<td>3.00</td>
<td>3.00</td>
<td>6.00</td>
<td>7.00</td>
<td>6.00</td>
<td>2.00</td>
<td>4.00</td>
<td>5.00</td>
<td>1.00</td>
</tr>
<tr>
<td>*More in charge</td>
<td>3.00</td>
<td>3.00</td>
<td>7.00</td>
<td>7.00</td>
<td>6.00</td>
<td>6.00</td>
<td>6.00</td>
<td>5.00</td>
<td>6.00</td>
</tr>
<tr>
<td>*Flexible</td>
<td>4.00</td>
<td>4.00</td>
<td>6.00</td>
<td>6.00</td>
<td>4.00</td>
<td>3.00</td>
<td>7.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Not sustainable</td>
<td>3.00</td>
<td>3.00</td>
<td>7.00</td>
<td>7.00</td>
<td>5.00</td>
<td>3.00</td>
<td>7.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>*Sensible, Holistic</td>
<td>5.00</td>
<td>5.00</td>
<td>6.00</td>
<td>7.00</td>
<td>6.00</td>
<td>5.00</td>
<td>4.00</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>*Nutrition</td>
<td>5.00</td>
<td>4.00</td>
<td>6.00</td>
<td>7.00</td>
<td>6.00</td>
<td>1.00</td>
<td>7.00</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>*Doesn't bring out cravings</td>
<td>5.00</td>
<td>4.00</td>
<td>6.00</td>
<td>7.00</td>
<td>6.00</td>
<td>1.00</td>
<td>7.00</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>*Healthy, doing it for me</td>
<td>1.00</td>
<td>1.00</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>3.00</td>
<td>5.00</td>
<td>2.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

#### Appendix I: Study 3 Repertory Grid Raw Data

| Opposite Pole
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Targeted at weight loss in itself</strong></td>
</tr>
</tbody>
</table>

* = Emergent pole
## Appendix I

### Original Grid (Linda)

**Scarsdale**

- Weight Watchers
- My Fitness pal App
- South Beach Diet
- More Exercise
- Tim Noakes
- Fast Diet
- Atkins
- Cutting Down

<table>
<thead>
<tr>
<th>Original Grid (Linda)</th>
<th>Focus on exercise</th>
<th>Focus on good food</th>
<th>Understnd body principles</th>
<th>Makes sense, research base</th>
<th>Address underlying probs</th>
<th>Trusted</th>
<th>Healthy</th>
<th>Dealt w/craving, satsif.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarsdale</td>
<td>5.00 4.00 4.00 5.00 1.00 6.00 4.00 4.00 5.00 4.00</td>
<td>3.00 3.00 3.00 5.00 6.00 4.00 5.00 4.00 2.00</td>
<td>4.00 3.00 3.00 3.00 6.00 4.00 3.00 5.00 3.00</td>
<td>3.00 3.00 3.00 3.00 6.00 4.00 3.00 5.00 3.00</td>
<td>5.00 4.00 4.00 4.00 6.00 4.00 5.00 5.00 4.00</td>
<td>1.00 1.00 7.00 7.00 1.00 1.00 7.00 1.00 7.00 7.00</td>
<td>1.00 1.00 7.00 7.00 1.00 1.00 7.00 1.00 7.00 7.00</td>
<td>3.00 3.00 3.00 3.00 6.00 4.00 3.00 5.00 3.00</td>
</tr>
</tbody>
</table>

### Original Grid (Jacinda)

**Jenny Craig**

- Weight Watchers
- Cut out Fizzy Drink
- Portion Control
- Takeaways sensible choice
- More Fruit
- More Water
- Food Diary

<table>
<thead>
<tr>
<th>Original Grid (Jacinda)</th>
<th>Focus on exercise</th>
<th>Focus on good food</th>
<th>Understnd body principles</th>
<th>Makes sense, research base</th>
<th>Address underlying probs</th>
<th>Trusted</th>
<th>Healthy</th>
<th>Dealt w/craving, satsif.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jenny Craig</td>
<td>1.00 3.00 7.00 7.00 7.00 7.00</td>
<td>1.00 3.00 7.00 7.00</td>
<td>1.00 3.00 7.00 7.00</td>
<td>1.00 3.00 7.00 7.00</td>
<td>1.00 3.00 7.00 7.00</td>
<td>1.00 3.00 7.00 7.00</td>
<td>1.00 3.00 7.00 7.00</td>
<td>1.00 3.00 7.00 7.00</td>
</tr>
</tbody>
</table>

### OPPOSITE POLE

* = Emergent pole
## Appendix I

### Original Grid (Collette)

<table>
<thead>
<tr>
<th>Complan</th>
<th>Weight Watchers</th>
<th>Less Wine</th>
<th>More exercise</th>
<th>Herbal Life</th>
<th>Atkins Diet</th>
<th>Fast Diet</th>
<th>Jenny Craig</th>
<th>Satiety Foods Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Unknown, not relevant</em></td>
<td>7.00</td>
<td>7.00</td>
<td>5.00</td>
<td>7.00</td>
<td>1.00</td>
<td>2.00</td>
<td>5.00</td>
<td>3.00</td>
</tr>
<tr>
<td><em>Interfering with body function</em></td>
<td>7.00</td>
<td>7.00</td>
<td>5.00</td>
<td>7.00</td>
<td>1.00</td>
<td>4.00</td>
<td>6.00</td>
<td>6.00</td>
</tr>
<tr>
<td>No way of knowing if working</td>
<td>7.00</td>
<td>7.00</td>
<td>5.00</td>
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<td>1.00</td>
<td>3.00</td>
<td>3.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Hardwork</td>
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<td>7.00</td>
<td>7.00</td>
<td>5.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Sadness, not worth it</td>
<td>6.00</td>
<td>6.00</td>
<td>5.00</td>
<td>4.00</td>
<td>4.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Feel like a slob</td>
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<td>1.00</td>
<td>4.00</td>
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<td>1.00</td>
</tr>
</tbody>
</table>

### Original Grid (Cathy)

<table>
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<tr>
<th>Activity</th>
<th>1.00</th>
<th>2.00</th>
<th>7.00</th>
<th>1.00</th>
<th>7.00</th>
<th>1.00</th>
<th>7.00</th>
<th>1.00</th>
<th>7.00</th>
<th>1.00</th>
<th>7.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>UnSustainable</td>
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<td>2.00</td>
<td>3.00</td>
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<td>9.00</td>
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<td>*Sustainable</td>
</tr>
<tr>
<td>Negative Experience</td>
<td>4.00</td>
<td>2.00</td>
<td>2.00</td>
<td>7.00</td>
<td>3.00</td>
<td>3.00</td>
<td>6.00</td>
<td>4.00</td>
<td>3.00</td>
<td>4.00</td>
<td>*Prev.pos experience</td>
</tr>
<tr>
<td>Don't understand the rationale/science</td>
<td>7.00</td>
<td>6.00</td>
<td>2.00</td>
<td>7.00</td>
<td>6.00</td>
<td>7.00</td>
<td>7.00</td>
<td>6.00</td>
<td>7.00</td>
<td>7.00</td>
<td>*Makes sense</td>
</tr>
<tr>
<td>Too hard/ Difficult</td>
<td>4.00</td>
<td>3.00</td>
<td>2.00</td>
<td>6.00</td>
<td>1.00</td>
<td>2.00</td>
<td>7.00</td>
<td>2.00</td>
<td>3.00</td>
<td>7.00</td>
<td>*Do-able</td>
</tr>
<tr>
<td>Side effects/ risky</td>
<td>7.00</td>
<td>6.00</td>
<td>1.00</td>
<td>7.00</td>
<td>1.00</td>
<td>6.00</td>
<td>1.00</td>
<td>5.00</td>
<td>7.00</td>
<td>6.00</td>
<td>Safe</td>
</tr>
<tr>
<td>Extra effort outside daily schedule</td>
<td>6.00</td>
<td>4.00</td>
<td>5.00</td>
<td>6.00</td>
<td>7.00</td>
<td>2.00</td>
<td>7.00</td>
<td>4.00</td>
<td>2.00</td>
<td>7.00</td>
<td>*Lifestyle/ everyday</td>
</tr>
<tr>
<td>Expensive/ Not good value</td>
<td>7.00</td>
<td>1.00</td>
<td>2.00</td>
<td>7.00</td>
<td>3.00</td>
<td>1.00</td>
<td>7.00</td>
<td>2.00</td>
<td>6.00</td>
<td>7.00</td>
<td>*Not costly</td>
</tr>
<tr>
<td>Sense of failure</td>
<td>3.00</td>
<td>2.00</td>
<td>2.00</td>
<td>6.00</td>
<td>2.00</td>
<td>1.00</td>
<td>6.00</td>
<td>2.00</td>
<td>6.00</td>
<td>4.00</td>
<td>Sense of achievement</td>
</tr>
<tr>
<td>Slow results</td>
<td>4.00</td>
<td>6.00</td>
<td>7.00</td>
<td>4.00</td>
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<td>3.00</td>
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<td>*Quick results</td>
</tr>
<tr>
<td>Unwilling</td>
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<td>1.00</td>
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<td>7.00</td>
<td>2.00</td>
<td>2.00</td>
<td>6.00</td>
<td>*Willing</td>
</tr>
</tbody>
</table>

### OPPOSITE POLE

* = Emergent pole
## Appendix I

### Original Grid (Ngaihe)

<table>
<thead>
<tr>
<th>Weight Watchers</th>
<th>Jenny Craig</th>
<th>Avoid 'bad' foods</th>
<th>Don't buy wrong foods</th>
<th>Focus on fruit/vege</th>
<th>Avoid processed</th>
<th>More exercise</th>
<th>Less wine</th>
<th>Satiety Foods Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rigid, controlling</td>
<td>3.00</td>
<td>1.00</td>
<td>6.00</td>
<td>5.00</td>
<td>7.00</td>
<td>7.00</td>
<td>6.00</td>
<td>5.00</td>
</tr>
<tr>
<td>*Why Pay</td>
<td>1.00</td>
<td>1.00</td>
<td>6.00</td>
<td>6.00</td>
<td>7.00</td>
<td>6.00</td>
<td>6.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Support needed/prop</td>
<td>3.00</td>
<td>3.00</td>
<td>6.00</td>
<td>6.00</td>
<td>7.00</td>
<td>6.00</td>
<td>6.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Focus on weight alone</td>
<td>3.00</td>
<td>3.00</td>
<td>6.00</td>
<td>6.00</td>
<td>7.00</td>
<td>6.00</td>
<td>7.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Fake, hidden sugar</td>
<td>5.00</td>
<td>4.00</td>
<td>6.00</td>
<td>6.00</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>5.00</td>
</tr>
<tr>
<td>*Lasy</td>
<td>1.00</td>
<td>1.00</td>
<td>7.00</td>
<td>6.00</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Not how I choose to be</td>
<td>1.00</td>
<td>1.00</td>
<td>6.00</td>
<td>6.00</td>
<td>7.00</td>
<td>7.00</td>
<td>6.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Not being creative</td>
<td>1.00</td>
<td>1.00</td>
<td>6.00</td>
<td>6.00</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>5.00</td>
</tr>
</tbody>
</table>

* = Emergent pole

---

### Original Grid (Sharon)

<table>
<thead>
<tr>
<th>Eating Mgmt Plan</th>
<th>Counting Calories</th>
<th>Fast Diet</th>
<th>Weight Watchers</th>
<th>Fit for Life</th>
<th>Kiss Diet</th>
<th>Count</th>
<th>Reduce Carbs</th>
<th>Bread Diet</th>
<th>Jenny Craig</th>
<th>Satiety Foods Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrictive, strict</td>
<td>7.00</td>
<td>5.00</td>
<td>3.00</td>
<td>6.00</td>
<td>1.00</td>
<td>5.00</td>
<td>3.00</td>
<td>2.00</td>
<td>2.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Little room for personal choice</td>
<td>7.00</td>
<td>6.00</td>
<td>3.00</td>
<td>5.00</td>
<td>3.00</td>
<td>6.00</td>
<td>5.00</td>
<td>2.00</td>
<td>1.00</td>
<td>7.00</td>
</tr>
<tr>
<td>*Unnatural, outside normal practice</td>
<td>7.00</td>
<td>6.00</td>
<td>2.00</td>
<td>7.00</td>
<td>2.00</td>
<td>7.00</td>
<td>3.00</td>
<td>1.00</td>
<td>2.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Not sustainable</td>
<td>7.00</td>
<td>5.00</td>
<td>1.00</td>
<td>7.00</td>
<td>1.00</td>
<td>7.00</td>
<td>1.00</td>
<td>1.00</td>
<td>4.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Denying food groups</td>
<td>7.00</td>
<td>7.00</td>
<td>3.00</td>
<td>7.00</td>
<td>2.00</td>
<td>7.00</td>
<td>2.00</td>
<td>1.00</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Not balanced</td>
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<td>7.00</td>
<td>2.00</td>
<td>7.00</td>
<td>2.00</td>
<td>7.00</td>
<td>2.00</td>
<td>1.00</td>
<td>1.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Faddish</td>
<td>7.00</td>
<td>6.00</td>
<td>2.00</td>
<td>6.00</td>
<td>2.00</td>
<td>7.00</td>
<td>2.00</td>
<td>1.00</td>
<td>6.00</td>
<td>7.00</td>
</tr>
<tr>
<td>*Elite, elect, religious pure</td>
<td>7.00</td>
<td>5.00</td>
<td>4.00</td>
<td>5.00</td>
<td>2.00</td>
<td>7.00</td>
<td>2.00</td>
<td>1.00</td>
<td>4.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Denial as a pleasure</td>
<td>7.00</td>
<td>5.00</td>
<td>3.00</td>
<td>6.00</td>
<td>2.00</td>
<td>5.00</td>
<td>3.00</td>
<td>1.00</td>
<td>3.00</td>
<td>6.00</td>
</tr>
</tbody>
</table>

* = Emergent pole

---

OPPOSITE POLE

PREFERRED POLE
### Original Grid (Maggie)

<table>
<thead>
<tr>
<th>Blood Type Diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>No gluten</td>
</tr>
<tr>
<td>No dairy</td>
</tr>
<tr>
<td>Jenny Craig</td>
</tr>
<tr>
<td>Weight Watchers</td>
</tr>
<tr>
<td>Sure Slim</td>
</tr>
<tr>
<td>Avoiding bad</td>
</tr>
<tr>
<td>Less wine / beer</td>
</tr>
<tr>
<td>Increase water</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Open to abuse, bad foods</th>
<th>7.00</th>
<th>6.00</th>
<th>6.00</th>
<th>6.00</th>
<th>2.00</th>
<th>7.00</th>
<th>6.00</th>
<th>7.00</th>
<th>5.00</th>
<th>3.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Pure natural, elim. bad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grey, open to temptation</td>
<td>3.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>1.00</td>
<td>7.00</td>
<td>4.00</td>
<td>2.00</td>
<td>3.00</td>
<td>1.00</td>
</tr>
<tr>
<td>*Black &amp; White</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too standardized &quot;one size fits all&quot;</td>
<td>7.00</td>
<td>6.00</td>
<td>6.00</td>
<td>2.00</td>
<td>2.00</td>
<td>7.00</td>
<td>6.00</td>
<td>6.00</td>
<td>5.00</td>
<td>1.00</td>
</tr>
<tr>
<td>*Personalised, individual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Less healthy</td>
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<td>7.00</td>
<td>7.00</td>
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<td>5.00</td>
<td>6.00</td>
<td>7.00</td>
<td>6.00</td>
<td>7.00</td>
<td>4.00</td>
</tr>
<tr>
<td>*Healthy items, feel good</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes you feel guilty</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>6.00</td>
<td>3.00</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>5.00</td>
</tr>
<tr>
<td>*Makes you more content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abusing your body</td>
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<td>7.00</td>
<td>7.00</td>
<td>6.00</td>
<td>5.00</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>6.00</td>
<td>3.00</td>
</tr>
<tr>
<td>*Doing right for body</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

**OPPOSITE POLE**

* = Emergent pole

### Original Grid (Stella)

<table>
<thead>
<tr>
<th>Low carbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No protein diet</td>
</tr>
<tr>
<td>Garcinia Cambogia</td>
</tr>
<tr>
<td>Hypno-therapist</td>
</tr>
<tr>
<td>Self-designed</td>
</tr>
<tr>
<td>More exercise</td>
</tr>
<tr>
<td>Jenny Craig</td>
</tr>
<tr>
<td>Weight Watchers</td>
</tr>
<tr>
<td>Soup Diet</td>
</tr>
<tr>
<td>Satiety Foods Concept</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Less effective</th>
<th>5.00</th>
<th>1.00</th>
<th>1.00</th>
<th>7.00</th>
<th>7.00</th>
<th>7.00</th>
<th>5.00</th>
<th>4.00</th>
<th>2.00</th>
<th>5.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>*More effective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not good for your health</td>
<td>5.00</td>
<td>1.00</td>
<td>1.00</td>
<td>7.00</td>
<td>7.00</td>
<td>7.00</td>
<td>5.00</td>
<td>4.00</td>
<td>1.00</td>
<td>6.00</td>
</tr>
<tr>
<td>*Better for your health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Make you think about food</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>6.00</td>
<td>6.00</td>
<td>6.00</td>
<td>5.00</td>
<td>4.00</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Keeps mind of food</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Didnt feel capable</td>
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<td>4.00</td>
<td>1.00</td>
<td>7.00</td>
<td>6.00</td>
<td>6.00</td>
<td>5.00</td>
<td>4.00</td>
<td>2.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Feel more capable</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>No assistance</td>
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<td>2.00</td>
<td>1.00</td>
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<td>6.00</td>
<td>6.00</td>
<td>6.00</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>*Assistance Back up</td>
<td></td>
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<td>6.00</td>
<td>6.00</td>
<td>6.00</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>*Turned on a light</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Emotions up &amp; down</td>
<td>4.00</td>
<td>1.00</td>
<td>1.00</td>
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<td>*Own power confidence</td>
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**OPPOSITE POLE**

* = Emergent pole

**PREFFERED POLE**

* = Emergent pole
List of References


