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MAKING SENSE AND TALKING SENSE: A CASE STUDY OF THE CORRELATIONS BETWEEN SENSEMAKING, IDENTITY AND IMAGE IN THE NEW ZEALAND FUNCTIONAL FOOD INDUSTRY

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Abstract

Functional foods are purported by scientists to provide consumers with health benefits over and above food's most basic uses: providing energy and sustaining life. Western nations, including New Zealand, face significant health challenges as their populations suffer from unprecedented rates of chronic illnesses like cancer and obesity, and health-conscious consumers appear willing and able to purchase these products. The functional food industry has been growing rapidly for the last decade and is widely tipped to continue this growth. However, there is concern that the market is largely unregulated and consumers are confused by the sheer volume of news and information about functional food and health issues.

The purpose of this study is to examine the way that a functional food producer makes sense of its role in this complex social, political and economic context, particularly regarding its contribution to public health. The study takes a communication perspective and uses primarily a thematic analysis. Theories of organisational sensemaking, identity and image provide a framework for the case study analysis focusing on organisational communication with stakeholders and attempts to manage contextual issues that affect both the case study organisation and the whole industry. Data was gathered by interviewing higher-level managers from a range of divisions in the organisation, and by collecting a selection of corporate communication documents produced by the organisation for consumers.

The study found that the case study organisation's identity was heavily influenced by health values that align with the product's proven health benefits. However, the organisation promotes the product as a premium food product, which prices a number of consumers out of the market, and illustrates the limitations this particular product has for improving consumer health. At the same time, the organisational identity comes under threat from challenges to the sustainability of the organisation's production methods. Analysing the way organisational members respond to these threats provides an interesting picture of the way sensemaking processes are affected by external influences as internal stakeholders re-assess the organisation's identity.

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Chapter ONE - Introduction

"The doctor of the future will give no medication, but will interest his patients in the care of the human frame, diet and in the cause and prevention of disease." - Thomas Edison

Issues about food and health appear frequently in media coverage, political debates and day-to-day discussion in New Zealand. One does not have to try hard to find multiple news stories recounting the role that food plays in personal health. For example, New Zealand's largest newspaper by circulation, The New Zealand Herald, regularly features headlines like these: "Broccoli proves to be ally in prostate cancer fight" (2007); "Who ate all the pies? NZ is third fattest nation" (2009); "Food choice not supplements key to health" (Fleming, 2010); "Fruit juice, apples linked to fetus harm" (Davison, 2011); "Study links junk food diet to lower IQ" (2011); and "Our hungry kids: Bad diet linked to skin and lung conditions" (Johnston, 2011). One story, "Finger-lickin' good for cystic fibrosis kids", even reported that consuming KFC benefitted children with cystic fibrosis as they have difficultly metabolising fat (Gillies, 2010). Articles like these characterise the link between food consumption and health outcomes, which is generally well acknowledged and provides an interesting site for scientific research, product development, and accompanying corporate communication. As researchers better understand the relationship between nutrition and health, they conduct more work developing functional foods as "a practical and new approach to achieve optimal health and possibly reduce the risk of disease" (Mollet & Rowland, 2002, p. 483). Many research institutes, food and medical companies around the world are busy trying to develop food that can be sold by promoting its contribution to consumer health.

Food science research and development is now growing throughout the Western world as well as in many emerging economies, as scientists study, create and uncover more "functional foods". Researchers and consumers alike may struggle to understand exactly what this entails as the term is used by different people to mean different things. For example, the Functional Foods Science Centre (FFSC) at Lund University in Sweden uses this definition: "Functional

foods are foods designed to provide a specific and beneficial physiological effect on health, performance and/or well-being extending beyond the provision of simple nutrients. The effect should be documented scientifically" (FFSC, 2009, para. 1). Two key terms in this definition are "designed" and "physiological", which suggest that the food is created deliberately to provide a health benefit in a similar fashion to conventional medicine. At the other end of the spectrum, Kalra (2003, p. 27) has used a very broad definition that could include almost any food or combination of food: "[Food that] provides the body with the required amount of vitamins, fats, proteins, carbohydrates, etc, needed for its healthy survival" (Kalra, 2003, p. 27). This definition is a significant departure from the previous one and almost contradicts completely the former's idea of "extending beyond the provision of simple nutrients". The problematic definition of "functional food" is dealt with in more detail in the next chapter.

New Zealand is actively involved in functional food research, which is carried out in many institutes including AgResearch, Plant & Food New Zealand, Massey University, and the Universities of Auckland and Otago. The New Zealand Government encourages this development and promotes the industry to potential foreign investors through agencies like New Zealand Trade & Enterprise (2011):

The country has many competitive and comparative advantages in the health ingredients and functional foods industry, including world class science, unique raw materials, excellence in food research, safety and traceability. Our internationally renowned research institutions, together with our biodiversity and a pristine growing environment, make New Zealand an ideal place to develop and manufacture innovative new foods. – New Zealand Trade and Enterprise (para.10)

The increasing role of scientific research does pose some potential issues however. As food is increasingly used for medical reasons and is communicated progressively more often through scientific data, the boundary between what is understood as "food" and what is understood as "medicine" becomes blurred, which Lawrence and Germov (as cited in Scrinis, 2008) call the "medicalization" of food.

It is the conceptual interface between food and medicine where understandings of critically important ideas are open to interpretation: ideas like health, well-being, disease prevention, and how these things are best attained. Some researchers have argued that "better knowledge and a broader

communication should lead to better and healthier nutrition to the benefit of the consumer" (Mollet & Rowland, 2002, p. 483). But as the vast quantities of "knowledge" and "communication" available to consumers grow, so too does the potential for difficulties. "Communication in nutrition generally comes from multiple sources that are sometimes contradictory, creating an impression of chaos. And chaotic information often generates ignorance and easily becomes misinformation" (Roberfroid, 2002, p. S136). Even in less chaotic environments, health information can miss its target due to consumers' lack of "health literacy": their ability to understand and apply medical information, which in worst-case scenarios "increases the chances of dying of chronic and communicable diseases" (Wilson, 2003, p. 875). Scientists and producers of functional foods are therefore asking consumers to place significant levels of trust in their work and their products even though consumers may be confused about what all the information they receive means. With these circumstances in mind, this qualitative case study research uses sensemaking, identity and image theory to examine how a functional food producer understands its role in the wider process of delivering functional food to the market and how this understanding then feeds into the messages it communicates to the public.

Organisation of the Thesis

Chapter Two provides the relevant context for this case analysis. It uses a range of sources to define "functional foods" for the purposes of this study and briefly outlines the history of functional food development, the scientific reasoning behind the product category and the state of the market. It also explains the legislative context for functional foods and introduces the case study organisation.

Chapter Three explores the academic literature that underpins the later analysis. Public understanding of science and the role of science in society are key considerations for the study because scientific research is so important to the development of and communication about functional food. The increasing presence of science and health stories in the media, aided by professional communications practices, provides so much information about food and health that consumers may not necessarily understand. For this reason, the idea of health literacy is also discussed along with current academic findings about the way

consumers understand health claims made by functional food producers. While these ideas provide valuable context, the second part of the chapter outlines the theoretical concepts of organisational sensemaking, and identity and image, which form the basis for analysing the case study organisation itself, and the way it communicates stakeholders and adapts to issues from its operating environment.

Chapter Four explains the methodological considerations and the method itself, justifying the use of case-study method, and the value of an interpretive approach drawing from both thematic and rhetorical analytical techniques. The processes of collecting two separate data sets are also explained.

Chapter Five combines the key findings with the discussion based on the theoretical concepts in Chapter Three. It identifies the major themes that emerged from interviews with key internal stakeholders and uses sensemaking and organisational identity theory to examine how these themes might represent key facets of the case study organisation's identity. It also outlines major themes from corporate communication documents produced by the organisation to analyse the relationship between the organisational identity and organisational image.

The concluding chapter summarises the main findings and points of discussion, explaining the contribution and implications of the study and possible avenues for future research.

Chapter TWO - Background

Driven by the demand of health-conscious consumers, functional foods are "invigorating the US food industry...advances in food and medical science as well as changing consumer demand and demographics are fuelling growth in this market" (PricewaterhouseCoopers, 2009, p. 3). But in spite of this interest and growth to date, academics, industry professionals and regulators have been unable to offer a concrete, readily agreed definition for the term "functional food" (Scrinis, 2008). The first point of this chapter is to address this problem by reviewing a range of definitions on offer and synthesising them into a definition that will be used for the purpose of this thesis. The second section of this chapter provides a brief overview of functional food development to illustrate the market's strong growth and to explain the scientific logic behind the product category. Any future development hinges on a number of factors, but one of the most important is law and regulation. So the third section outlines the delicate legal environment that the New Zealand functional food industry operates in today, which has implications for consumers as well as producers of functional foods, and the way consumers and producers communicate with one another. The final section of this chapter describes the case study organisation, EnZed Salmon, which is a New Zealand company producing functional food.

Defining "Functional Food"

The term "functional food" first appeared in Japan in the 1980s and was used to describe foods that had been fortified with special ingredients that enhanced the food's physiological benefit (Hardy as cited in Siró, Kápolna, Kápolna & Lugasi, 2008). One of the remarkable things about this term is that despite being three decades old and still being used widely today, "functional food" has no readily agreed definition "but the term continues to be used as if it does have a clear meaning" (Scrinis, 2008, p. 541). In the modern marketplace, advertisers use the term regularly to describe any food accompanied by a health claim (Katan & DeRoos, 2004). Generally, the term is used to describe food that is particularly good for people's health (Scrinis, 2008). Roberfroid (2002) argues that the variety

of food and components of food, combined with the variety of health functions mean "no simple, universally accepted definition of functional food exists or will (ever) exist" (p. S133). This lack of clarity does, however, create some problems. Verbeke (2005) states that the divergent methods of defining and therefore quantifying functional food sales have resulted in varied measures of its actual size. So technically, no one can be absolutely sure of the value of the world market because no one definitive idea of what is actually being measured exists.

Scrinis (2008) notes that some functional food definitions include whole/natural foods but others specify foods that have been modified or fortified deliberately to enhance the health benefit. However, many definitions do not make this distinction. For example, Mollett and Rowland (2002) cite the International Life Sciences Institute Europe's definition: "A food can be regarded as functional if it is satisfactorily demonstrated to affect beneficially one or more target functions in the body, beyond adequate nutritional effects, in a way that is relevant to either improved state of health and well-being and /or reduction of risk of disease" (p. 483). This definition includes both natural and processed food as long as the claims are proven. Similarly, Diplock et al. (as cited in Siró et al, 2008) cite another definition from FuFoSE (European Commission's Concerted Action on Functional Food Science in Europe):

A food product can only be considered functional if together with the basic nutritional impact it has beneficial effects on one or more functions of the human organism thus either improving the general and physical conditions or/and decreasing the risk of evolution of diseases. The amount of intake and form of the functional food should be as it is normally expected for dietary purposes. Therefore, it could not be in the form of pill or capsule just as normal food form (p. 457).

The word "nutraceutical" is similar in meaning to that of "functional food". Dr Stephen DeFelice coined the term "nutraceutical" in 1989 and defined it as "any substance that is a food or part of a food and provides medical or health benefits" (DeFelice, 1995, p. 59). In some cases the terms are used interchangeably: "...the concept of "functional foods' (also referred to as "nutraceuticals" or "pharmaceutical foods")" (Mollet & Rowland, 2002, p. 483). But Roberfroid (2002) maintains that functional food is a unique concept that warrants its own definition

that is "different from nutraceutical, f(ph)armafood, medifood, designer food or vitafood, and a category that does not include dietary supplements" (p. S134). Kalra (2003) provides some distinction for the term, classifying a "functional food" as one that provides all the necessary dietary components (protein, fat, carbohydrate, vitamins, nutrients, energy, fibre and so on) that are needed to maintain normal healthy bodily function. So a functional food can be consumed regularly as part of a normal everyday diet (PricewaterhouseCoopers, 2009). However, a functional food becomes a "nutraceutical" when it "aids in the prevention and/or treatment of disease(s) and/or disorders other than anaemia" (Kalra, 2003, p. 27). (A functional food used to treat anaemia is not considered a nutraceutical as anaemia is results from a poor diet, particularly deficient in iron.) An important aspect inherent in this definition is that a functional food for one person can be a nutraceutical for another, depending on whether or not it is being consumed specifically to treat health impairment. Both functional foods and nutraceuticals must be in the form of a normal food; if they are in a capsule or pill form, they would be referred to as a "dietary supplements" (Kalra, 2003).

While the purpose of consumption helps distinguish a "nutraceutical" from a "functional food", there must be something about functional food that differentiates it from regular "food". The most obvious difference is the use of scientific research to establish health claims made about the food's effect on consumer health: "In theory, all foods are functional but, in practice, it behoves to us to prove it" (Tapsell, 2008, p. S25). The Australian National Excellence Centre for Functional Foods (NECFF) (as cited in Scrinis, 2008) makes specific reference to scientific research as part of its definition of functional food: "Any food promoted on a health platform, where the health benefits are supported by good scientific evidence, is a functional food. The strong underpinning of science is what differentiates functional foods from other food categories" (p. 542). But food producers and independent researchers do not conduct scientific research without intending to inform people about the findings; consequently, the science is only worth doing if it can be communicated to consumers: "The market is another key stakeholder for the definition of functional foods" (Tapsell, 2008, p. S25). Nestle (as cited in Katan & De Roos, 2004) went as far as defining functional foods as "products created just so they can be marketed using health claims" (p. 370). And

certainly the marketing element is important to the definition; Scrinis (2008) suggests that the term "functionally marketed food" could be used interchangeably with functional food in the vast majority of times it is written.

Still, scientific evidence and the deliberate marketing thereof may not be sufficient for products to be fairly referred to as functional foods. Walzem (2004) posits that to effectively prevent disease, functional foods must meet three criteria: be formulated to address specific metabolic needs of consumers, be scientifically assessed, and be valued enough by consumers to be eaten regularly long term. Consistent with Walzem's first point is Roberfroid's (2002) emphasis on individual differences: "A functional food will not necessarily be functional for all members of the population" (p. S134). Kok (as cited in Roberfroid, 2002) suggests that studying individual biochemical needs and making specific matches with food components could be one of the most important scientific undertakings to better understand the relationship between genes, medical conditions, and diet. A person may consume a functional food with claims that have sound scientific backing behind it, but the individual's unique physiological make up mitigates the supposed benefit of eating the food. This issue of individual difference is why the idea of "health literacy" (discussed later in this chapter) may be important. If a person understands health and how to achieve it in a broad and complete sense, he/she can make more informed choices that prevent health issues occurring (Peerson and Saunders, 2009).

For the purpose of this thesis, drawing from all of the issues discussed in this section, a "functional food" is understood to be a natural or processed food product that is marketed, at least in part, using scientifically substantiated claims that would reasonably lead a consumer to believe that consuming the food will help to build or maintain his/her health and well-being, including the prevention but not the treatment of chronic disease and other medical impairments.

Functional Food Development

Using food for therapeutic or medicinal purposes is nothing new. By the late fifteenth century, Portuguese explorer Vasco de Gama was already using citrus fruit to treat sailors with scurvy, which is caused by vitamin C deficiency, although this was not proven until 1932. Many government-driven public health initiatives

have used functional foods to combat medical conditions. In the 1940s, vitamin B-fortified flour was used to fight pellagra; vitamin D-enriched milk practically eradicated rickets; and iodine-enriched salt dramatically reduced the occurrence of goitre (PricewaterhouseCoopers, 2009). But the origin of modern food science can be traced to 1980s Japan, when Japanese scientists looked to food to help combat the health-related issues that coincided with the ageing of its population (Arai, 2002). The relationship between food and health has been part of the national consciousness throughout its history and is grounded in centuries old Chinese wisdom that "medicine and food are isogenic" (Arai, 2002, p. S139). This idea essentially means that medical health and diet should be understood as one and the same thing, as their relationship with the human body is so intertwined that they cannot be fully comprehended separately.

Scientific research has "repeatedly shown that diet is one of many factors that can significantly influence the risk and severity of a number of diseases" (Walzem, 2004, p. 518). This link between diet and illness provides the scientific basis for functional food development: "Full-blown disease results from combinations of several relatively minor metabolic disturbances sustained consistently over a long period of time (chronic disease)" (Walzem, 2004, p. 518). Over a lifetime, a repeated pattern of poor nutritional choices is positively correlated with the development of chronic diseases including cardiovascular disease, diabetes, osteoporosis, cancer and obesity. Based on this premise, the logic behind functional food consumption is relatively simple. If diseases can result from sustained repetition of poor, albeit often simple, choices of food consumption then conversely, "minor corrections applied consistently would effectively prevent such disease and preclude the need for more drastic end-stage medical interventions such as surgery or aggressive drug therapies" (Walzem, 2004, p. 518).

While scientific researchers have significant interest in functional foods, marketers are perhaps even more enthused. Bleiel (2010) discusses today's top ten marketing "mega trends" and the influence these trends have on nutrition. Mega trends are those that influence consumer behaviour globally. The number one mega trend is "The new fifties generation", which is the generation of people more commonly referred to as "Baby Boomers"; people from this generation have more wealth than any other before them and have a strong interest in health-related

issues. At the same time, they suffer more lifestyle-related health complications than any other generation, most notably obesity (Bleiel, 2010). Their lifestyle pattern is typified by diets where energy intake exceeds output, in spite of widespread awareness of the major health issues that result; the new fifties generation is also very focused on improving its health and is regarded as susceptible to marketing efforts that address these concerns.

Relatedly, at place number ten on the list of mega trends is "Health". This trend affects public nutrition by driving the growing development of functional food that has a specific health advantage. In short, functional foods are trendy for consumers and potentially lucrative for producers. In 2009, functional foods accounted for 5 per cent of the US food market, some \$20-30 billion in sales; growth estimates for the market range from 8.5-20 per cent above that of the total food market, which itself is estimated to grow by between one and 4 per cent (Datamonitor, as cited in PricewaterhouseCoopers, 2009).

Ashwell (2001) argues that there is nothing very new about the science behind functional foods even though it has become a new "buzzword" recently. But the science still holds a lot of opportunity: "Nutrition as a science in the twenty-first century will, in addition to placing emphasis on a balanced diet, develop the concept of optimum nutrition" (Roberfroid as cited in Ashwell, 2001, p. 859). This view demonstrates that there is considerable commitment to and belief in functional foods within the scientific community, although others take a more precautionary approach. Lawrence and Rayner (1998) maintain that the general consensus around food is that the best health outcomes are created by focusing on total diet, rather than the unique properties of individual foods. This position holds that there are no "bad" or "good" foods, just a lack of balance overall. Consequently, accepting functional foods necessitates a shift in mindset by consumers and health experts. The functional food argument assumes that "worldwide the food supply needs to be "fixed" on public health grounds" (Lawrence & Rayner, 1998, p. 76) even though the main countries engaged in this debate have better access to food and healthcare than ever before.

Law, Regulation and Politics

Lawrence and Rayner (2008) stated over a decade ago that there must be some regulatory framework for functional food and nutraceutical products to protect wider public health concerns. Interestingly, today New Zealand lacks legislation governing the specific product category of functional food apart from general market laws such as the Fair Trading Act and Consumer Guarantees Act. Lawrence and Rayner (1998) have also argued that "functional foods and health claims are among the most complex and controversial issues facing food regulators" (p. 76).

Food regulation in Australia and New Zealand is currently governed by a "bi-national Government agency": Food Standards Australia New Zealand (FSANZ). But both countries maintain their own rules and regulations regarding the marketing, sale and manufacture of medical products and services. The food authority's main purpose is administering and developing the Australia New Zealand Food Standards Code, which was established by the Food Regulation Agreement 2002 (FSANZ, 2010). The code is enforced by the relevant states and territories of the two countries. It covers areas such as traditional food standards, labelling, identification, additives, residues, product standards and food safety. However, the terms "nutraceutical" (a term sometimes used synonymously with functional food) and "functional food" are not included anywhere in the code, which is of particular relevance to this study as it effects the legal environment that the case study organisation operates in. The closest mention is "novel foods", which are those that do not have "a history of human consumption". However, many functional foods, like those in the form of dairy products, have been consumed by humans for a significant length of time and the intent of the novel food standard is to control completely new foods entering the public food supply. The code's standards 2.9.5 (medical foods), 2.9.6 (foods formulated for special diets), and 2.9.7 (macronutrient modified foods) all have "reserved" status. This status means that no specific regulatory standards exist now, but there is intent to create standards at a future, albeit unspecified, time. In the meantime, members of the public are able to apply to the standards management officer in either Wellington or Canberra requesting to vary existing or to introduce new standards. While arguably few members of the public realise or care about this, it still

necessitates good relations between the functional food industry and its stakeholders.

On 16 July 2007, the then New Zealand Labour Government adjourned its Therapeutic Products and Medicines Bill, which would have established a joint agency with Australia to oversee and regulate therapeutic products on both sides of the Tasman (King, 2007). The government at the time did not have sufficient numbers in parliament to pass the bill, but FSANZ and the joint agreement remained in place so it could be revisited at a future time. This time did not occur before Labour New Zealand was replaced by a National-led government in 2008. Presently, the Australian Government Department of Health and Ageing (2007) also states on its website that the legislation has not been abandoned:

Negotiations between the two countries to establish ANZTPA have been postponed. The Agreement between the Government of Australia and the Government of New Zealand for the Establishment of a Joint Scheme for the Regulation of Therapeutic Products remains in place. Australia remains committed to a world-class regulatory scheme for therapeutic products to ensure that the safety and efficacy of medicines and therapeutic devices in Australia is paramount (para.2).

The deferred legislation was designed to update the 1985 Dietary Supplements Regulations, which were enacted when the majority of such products came in the form of tablets or capsules. Carole Inkster, director of the New Zealand Food Safety Authority (NZFSA), stated: "The range of products being sold under current regulations is far broader than could have been imagined when the regulations were first set down" (NZFSA says changes to supplement regulations will help protect consumers, 2007, para. 3). Although it was unable to proceed as it wished, the government made it clear that this regulation was not gone forever. Pete Hodgson, New Zealand's health minister in 2007, stated: "We will now consider the next steps, and announce them in due course. It is fair to say, however, that New Zealanders, and indeed the select committee, are aware that the status quo of an unregulated market for medical devices and complementary medicines cannot remain" (as cited in King, 2007, para. 9). Almost five years on, the issue has not reappeared on the legislative agenda and the government's senior partner, the National Party, makes no mention of functional food on its policy priorities that it

has listed on its website. Only months from a general election (November 2011), the National Party's main policy foci are around the economy, the public service, public safety, and rebuilding Canterbury following its series of major earthquakes. The party does however make a clear commitment to funding and promoting scientific research: "Investing in science will not only help keep New Zealand competitive but it is at the heart of our strategy to boost economic growth" (National Party of New Zealand, 2010, para. 5). Exactly if/when legislation controlling the production and consumption of functional food returns to the political agenda is unclear, although research from Denmark suggests that it may not be driven by politicians themselves.

Nielsen, Lassen and Sandøe (2011) interviewed Danish MPs representing parties across the political spectrum to ascertain why the functional foods issue has not become as public and as politically charged as that of genetically modified (GM) foods did in the 1990s and early last decade. The GM debate and political process involved considerable public participation and consultation but the authors note that although the two areas of research have a number of similarities, they "were unable to find examples of participatory procedures being employed in the area of functional foods in any European country, including Denmark" (p. 167). The main reasons cited by politicians included the "irreversible consequences" of releasing GM into the environment, the greater element of consumer choice with functional foods, and the more controversial and ethical dilemmas inherent with GM foods. And these reasons are certainly valid, but Nielsen, Lassen and Sandøe also noted that the political process favours an issue like GM but politicians thought that the functional food issue "is unsuitable for public debate" (p. 174). They were concerned that mass media were really only interested in conflict and controversy, which makes a debate that discusses negative and positive aspects politically dangerous to engage in. Each side is worried that the other side will argue about "hidden agendas" to portray them in a negative way regardless of which "side" they choose. The political right can be presented as food industry puppets, and the political left can be portrayed as interventionist, infringing on people's right to choose what they eat. So no politician really wants to risk making the first move in this debate and potentially the status quo will remain until something outside of politicians' control occurs that forces the issue onto the agenda. As such, neither the functional food industry nor the government can predict if or when it may need to address this issue.

The eventual outcome of legislation in New Zealand could have significant implications as New Zealanders may be more like the targeted functional food consumers than people in most other countries. Cardiovascular diseases like coronary heart disease are the most significant of all diet-related diseases in Western countries (Laugeson & Swinburn, 2000); and 40 per cent of all deaths in New Zealand from 1996 to 1997 resulted from cardiovascular diseases (Ministry of Health as cited in Ferguson & Philpott, 2003). Laugeson and Swinburn (2000) compared New Zealand's food supply to other OECD countries, finding that despite a slight improvement in dietary behaviour over the last few decades New Zealand is still "one of the least heart healthy of all OECD countries" (p. 315). New Zealand has the highest supply of butter per capita and one of the highest percentages of energy intake from fat: 36.7 to 39.5 per cent. The lowest intakes were found in Japan (26 per cent) and Mexico (25 per cent). New Zealand also has the highest fat intake from meat in the OECD. The authors state that programmes like "5+ a day" (fruit and vegetables) and the Heart Foundation "tick" are probably helping, but there is still a lot of room for improvement particularly in lowerincome households and among Maori and Pacific Island people. Ferguson and Philpott (2003), however, argue that this high-risk eating pattern coupled with the nation's research capabilities in horticultural and agricultural sciences mean "New Zealand is ideally positioned to be at the forefront of functional food development" (p. 3).

The Case Study Organisation

EnZed Salmon (not actual name) is privately owned company with the vast majority of its farming, factory, and corporate operations based in the Nelson and Marlborough Regions of New Zealand's South Island. While it is a "New Zealand company", its largest shareholder is owned by a Malaysian company. Annually, EnZed Salmon turns over more than NZD\$100 million and it has assets of over \$75 million. The company considers innovation and environmental sustainability to be among its key advantages.

The company's sales are split fifty-fifty between local and export markets, and exported product volumes were approximately even across the three key foreign markets of Australia, North America and Japan. The company targets a higher socio-demographic group for every product and market. The Marketing Manager described the target as people aged around 25 to 55 with a household income in excess of \$75,000 annually. In 2010, the median household income in New Zealand was \$64,272 and the mean was \$77,168 (Statistics New Zealand, 2010). The Marketing Manager cautioned that they did not want to be "too premium" but "mainstream premium", which he described in terms of magazine readership to be Cuisine and Dish readers rather than Australian Women's Weekly, Women's Weekly and New Idea readers. The Manufacturing Manager added the target consumer was probably most likely female because women purchase the product more often. According to the Export Sales Manager, the product is priced at a premium of about 30 to 100 per cent higher than most alternative products. This price means that the product services a niche market, the majority of which is reached through the food service industry.

EnZed Salmon targets a number of food service businesses in New Zealand and deals almost exclusively with this type of customer in its export markets. The Export Marketing Manager said premium food service was the company's key target in all of its markets and its ultimate aim is to have its brand name listed on menus at fine-dining restaurants. Several of the managers used the terms "white tablecloth" or "fine dining" to describe the restaurants that purchase the product. The Human Resource Manager said it was a delicacy product that was "very suitable" for fine dining restaurants and this was reiterated by other managers:

Food service globally is where we like to be. Within food service, we are really targeting in the segment of fine dining restaurants, white-table-cloth restaurants. And in terms of menu pricing you know, we'd like to target customers in the US that would have a \$30 main or, like they call, entree offering, happens to be about the same sort of number in New Zealand and New Zealand dollars. The top end of the white-table-cloth market, globally. – Head of Sales and Marketing

The company also distributes product to retailers. The Head of Sales and Marketing said that in New Zealand, mainstream supermarket chains stock the products but he said the company has no plans to do the same in export markets

because the company is too small to negotiate good terms with the large retailers and cannot afford the significant promotional and advertising costs that would need to accompany such a move. However, there are some specialty retailers, delicatessens and gourmet stores that sell the salmon overseas and in New Zealand. The company was looking at introducing a smoked salmon product for upper premium retailers in New York City. The Head of Sales and Marketing said a number of the value-added products were designed for entertaining, and therefore were purchased less regularly, suiting a specialty retailer rather than a supermarket chain.

Conclusion

The size and value of the functional food market continues to grow, fuelled by enthusiasm from scientists, food producers and consumers alike. Functional food is a unique product category characterised by the deliberate use of scientific research to communicate a health benefit to consumers, who appear to be happy to pay the financial price that comes with it. New Zealand and other Western nations face growing health issues and costs, especially as a result of chronic disease. As functional food is designed to prevent chronic disease when consumed regularly over a long period of time, it offers significant potential benefits. However, the ambiguity of many definitions the food category and the vagueness of legislation governing it may be problematic now or in the future. EnZed Salmon is a New Zealand company that produces significant quantities of functional food and therefore provides an interesting case from which to examine functional food producers' own sense of the industry they are in and how it manages the issues within its operating environment. The following literature review describes relevant academic research that recognises the main contextual features affecting the industry from a communications perspective, and the review also outlines the important theoretical concepts that will inform the case study analysis.

Chapter THREE - Literature Review

This chapter outlines the relevant academic literature that informs this study theoretically. The first section examines the contextual aspects that may influence the way the functional food market operates. The literature comprises theory about the public understanding of science, the role of the media and public relations in health communication, the health literacy of consumers, and consumer research specifically in the functional food industry. The second section of this chapter outlines the organisational and communication theory that provides a basis to examine these producers. Organisational sensemaking, identity and image explain the way internal stakeholders understand their organisation's role in the industry with respect to contextual issues. With these two sections taken together, the literature provides a useful background for this study examining the characteristics of the case study organisation's identity and its construction relative to the social, political, and economic context of the functional food industry.

Contextual Issues Around Functional Foods

The functional food market exists because of collaboration between the food industry and the scientific community and as such it is affected by trends in both. The first section of this chapter looks at important issues that could impact the way that various stakeholders in the market operate. The section looks at the relationship between science and the public, consumer research, the way claims are made to the public and how consumers may or not be able to read health-related claims as they were intended to be read.

Science, public understanding, the media and PR. The field of science enjoys a privileged place in society allowing scientists considerable freedom to independently produce "reliable knowledge" presumably for the public good (Meyer, 2006). However, Michael (as cited in Kallerud & Ramberg, 2002) distinguishes between "science-in-general" and "science-in-particular", where the former enjoys an almost divine status detached from wider society and the latter refers to specific, context-dependent scientific findings that are more likely to be critiqued by lay publics. Public opinion surveys repeatedly show that by and large,

the public respects and is interested by science-in-general (Kallerud & Ramberg, 2002). The public admiration for science-in-general is regularly used by both governments and scientists to justify scientific and technological research. Before the mid-1980s, scientists generally tended to keep their work private but a significant British report (known as the Bodmer Report) marked a shift in thinking stating that scientists were obliged to inform the public about the findings of their research (Miller, 2001). Today, scientists and research institutes routinely publish and present their findings to wider audiences and the public receives a continual supply of new scientific findings and discoveries.

The British Government and others around the world established agencies to actively promote scientific institutions and findings motivated by the belief that "the more the public knows about science, the more they'll come to love it" (Miller, 2001, p. 116). Academics refer to this approach as the "deficit model" of public understanding about science, which essentially sees the general public as ignorant and uninformed about it, so the point of communicating science then is to help the public understand things they "should" know (Turney, 1996; Kallerud & Ramberg, 2002). Journalists too have (perhaps unknowingly) subscribed to the basic assumptions of the deficit model and science journalism for many years has equated to little more than transmitting scientific information in language the public can understand; scientifically produced information conforms to the journalistic principle of objectivity and journalists "accept science as an authority not to be questioned" (Meyer, 2006, p. 242). Turney (1996) noted however that previous attempts to improve the public's general science knowledge have been fruitless, showing that the public does not pay attention to or retain general science information that many scientists believe they should know. Layton (as cited in Turney, 1996) argues that there is practically no point trying to give a general education to the public without considering people's particular requirements and situations because they will use scientific information only when it suits them in their particular social settings. For example, Turney (1996) cites the case of a prisoner who taught himself enough about neurobiology from inside jail to successfully overturn his conviction for causing a child's head injury. Generally though, people do not possess such strong motivation to understand complex scientific information, but they do engage with it more actively than the deficit

model assumes. Turney (1996) explains that people are very "resourceful" at bringing together information for their particular needs and using it accordingly. Lambert and Rose (as cited in Turney, 1996) researched patient responses in medical situations finding that "families put this [doctors'] advice with information from lots of other sources, ranging from health education campaigns, media articles to folklore and conversations with friends" (p. 1089). And there is certainly no shortage of scientific information available, particularly from media sources.

News stories about science have become ubiquitous. De Semir (2000) stated that the amount of science news that fills headlines has been consistently increasing. But problematically, the public is not always aware that much of the scientific "news" that they read "in acute, and potentially threatening, situations was of a 'science-inthe-making' variety that was still being "socialized" by the scientific community" (Miller, 2001, p. 117). De Semir (2000) states that scientific "truths" exist relative to previous scientific discoveries and are always being reviewed and challenged by other scientists. But the quest to manufacture news adds to the potential problem as science reporters pick and choose the most newsworthy information from the scientific process: "the news must spark debate and emotion in its audience to maintain interest" (De Semir, 2000, p. 125), which means "news" does not necessarily mean "fact" and this creates a significant amount of misinformation that that can lead the public to expect more from science than it can actually deliver. Scientific certainties on the other hand, are very rarely headline news and are often end results of extremely long processes so the findings are hardly "new"; consequently, facts appear in textbooks and not newspapers (Miller, 2001). At the same time, special-interest groups have become increasingly savvy to the media's need for science to be newsworthy and actively cultivate information to meet this need (De Semir, 2000). Meyer (2006) states that "the orientation towards the marketplace and the competition for research funding have contributed to the growth of PR-like enterprises of science transmission" (p. 244). Younger scientists are now being encouraged to take media training courses or spend time working in media organisations as part of their training (Miller, 2001). And scientific journals routinely use press releases with temporary embargoes to give media organisations time to prepare news articles about scientific discoveries to coincide with journal publishing, and press releases simplify the scientific information ready for public

consumption (De Semir, 2000). In short, science is now also a public relations exercise. But news still has to be relevant to media audiences and one area of science that frequently becomes news is health and medicine and this field arguably feels the media pressure more than any other in the sciences.

The media attention given to scientific information has increased in tandem with growing interest in public health issues (De Semir, 2000). Johnson (1998) cites an American National Health Council survey finding that 75 per cent of survey respondents give a "moderate amount" (50 per cent) or a "great deal" (25 per cent) of attention to health and medical news in the media. Turney (1996) cites a UK national survey that found "for virtually everyone, medical research is the most interesting branch of science" (p. 1088). Johnson (1998) states that media-medicine interactions have been "frenzied" since the 1980s with increasing use of business tactics like press conferences, Wall Street clippings, and video news releases. Winsten (as cited in Johnson, 1998) quotes one medical researcher saying, "We would go up like lambs to the slaughter and do exactly what the PR people would want" (p. 89). However, Johnson (1998) also explains that medical research, like all scientific research, is a process of continual experimenting and results or "facts" can very quickly become out of date or refuted by future experiments. Rowe (2000) argues that this gives the public the impression that scientists are "always changing their minds" (p. 6) and that the increasing volume of stories is not helping consumers make healthy decisions particularly regarding food.

Health-focused stories about food are becoming problematic: "Quite simply, consumers are confused" (Rowe, 2000, p. 6). Some 73 per cent of consumers "strongly agree" or "mostly agree" that there is too much conflicting information about which foods are healthy and which are unhealthy but in spite of the confusion, "food news is still hot news" (p. 7). Rowe (2000) also notes that media are now quoting scientific researchers and experts more often than they quote people from the food industry. Media coverage about food and health is growing and importantly 57 per cent of media information about benefits or harms of food and diet were related to a functional benefit or ingredient of the food, so the media are willingly reporting the results of new studies about the health effects of food and food components. An advisory group from Harvard University (as cited in Rowe, 2000) looked at the prevailing public confusion about health that exists in

spite of unprecedented access to information. The group acknowledged the media's role but argued that "a chain of communicators all have a hand in how information is disseminated to consumers" (p. 8), which includes scientists, public relations and marketing professionals, editors and journalists; these groups all have their own agendas. Referring to science information, Miller (2001) argues that people communicating to target publics need to be much more aware of what the specific public already knows and understands. For this reason, the medical concept of health literacy could be an important consideration for stakeholders in the functional food market as well.

Health literacy. Medical researchers and practitioners use the term "health literacy" to refer to an individual's capacity to obtain and understand basic health-related information to make decisions that positively impact on his/her heath status (Peerson and Saunders, 2009). Literacy is an extremely important factor that can undermine communication in the health industry. Wilson (2003) states that "literacy skills predict an individual's health status more strongly than age, income, employment status, education level, and racial or ethnic group" (p. 875); surprisingly often, patients cannot follow their doctors' instructions simply because they cannot read them. In the US, 60 per cent of English-speaking patients in the public healthcare system could not read and understand a standard consent form (Dreger & Tremback, 2002). Patients often feel shame or embarrassment admitting that they cannot read or understand information that they need, and this is a major obstacle for doctors and other medical staff who are trying to correctly diagnose various conditions (Dreger & Tremback, 2002). Typically, the patient will pretend that he/she does understand what is going on and try to move on to avoid more embarrassment (Wilson, 2003). While doctors are becoming more and more aware of the issue, they are still often surprised at its extent and do not always possess the skills to detect when patients have poor health literacy and then manage the situation accordingly.

People with poor health literacy have generally less control over their personal health. They are more likely to develop chronic illness (which is typically targeted by functional food producers) and poor physical or mental health. They are less likely to access health services and when they do, they often obtain inferior results from receiving the same treatment as someone with better health literacy receives

(Hibbard et al. as cited in Peerson & Saunders, 2009). Dreger and Tremback (2002) argue that patient "noncompliance" may be far more often to do with misunderstanding prescriptions and instructions than it is to do with "wilful disobedience", which is often cited in the medical industry; this misunderstanding can cause anything from minor side effects to severe life-threatening conditions. Gazmararian, Williams, Peel and Baker (2003) studied patients who had chronic diseases, and found health literacy was independently related to the patients' understanding of their conditions, and made them more likely to correctly follow self-care recommendations, therefore avoiding re-hospitalisation. People with poor health literacy are also more likely to delay seeking medical help until they are quite ill, as they do not recognise and correctly interpret signs and symptoms of poor health, and perhaps most worryingly, these people may have little or no awareness that they lack these skills (Paasche-Orlow & Wolf, 2007). If health literacy poses these problems when disseminating health messages in the health industry, it is not illogical to suggest that similar issues may arise when communicating health messages in the functional food industry.

Researchers are also suggesting that a broader understanding of health literacy needs to be employed because people are continually making decisions that affect their health during the normal course of their lives: "Placing emphasis on health literacy outside of health care settings has the potential to impact on preventative health and reduce pressures on health systems" (Peerson & Saunders, 2009, p. 288-289). This argument is particularly relevant to the functional food industry, as people need to eat regularly and generally do so without directly (or even indirectly) consulting medical practitioners and as Walzem (2004) explained, the repeated pattern of minor yet poor choices in food consumption can lead to chronic illness if sustained over time. As such, consumers' health literacy is likely to affect the way that they interpret and understand messages about functional foods (and all other foods) and how/if to consume them, but the functional food market seems to have grown substantially without such consideration.

The functional food market. Bech-larsen and Scholderer (2007) describe the functional foods market as "highly dynamic" and even "experimental". The lack of a standard definition for "functional food", as discussed in Chapter Two, is problematic for marketers (Menrad, 2003) who are unable to measure the market

value with precision, but nonetheless it has been identified as a market with strong short-term growth prospects (Läteenmäki as cited in Krystallis, Maglaras & Mamalis, 2008). Demographic trends such as the ageing population, increasing scientific research and development, and growing consumer consciousness are likely to assist the market's growth for some time (Menrad, 2003) and while the volume of functional food sales is likely to increase, estimates suggest that it will not develop into a mass market, but will be "multi-niche" with a significant number of varied, specialist products and relatively few high-volume lines (Menrad, 2003). So far, the functional food market has experienced a high product-failure rate, which is typical of the food market generally (Menrad, 2003). Novartis' AVIVA product range is a good example, as it was introduced in 1999 and withdrawn one year later after a \$20 million marketing launch but poor sales. The range included cereals, biscuits and drinks designed to assist bone health, heart health and digestion. These functional benefits come with a price and functional foods tend to cost between 30 and 50 per cent more than their equivalent standard food lines; this price premium is likely to motivate producers to continue developing functional food products (Menrad, 2003) and corporate communication programmes to go with them.

Childs (as cited in Childs & Poryzees, 1997) surveyed leading food, pharmaceutical and biotechnology firms and found that the vast majority were conducting research in the functional food and nutraceutical area: 55 per cent of the food, 36 per cent of the pharmaceutical and 90 per cent of the biotechnology firms. Sixty per cent of these firms prioritised consumer research as the main avenue to gain more information: "The acceptance of nutraceuticals will rely heavily on consumer perceptions regarding their efficacy, safety and taste" (Childs & Poryzees, 1997, p. 434). Childs and Poryzees (1997) also tested these consumer preferences, finding that the majority of people prefer to consume more natural foods (particularly fruit and vegetables) to obtain the benefits functional foods offer; at the same time, the number of people actually consuming more fruit and vegetables is declining and the convenience of supposedly healthy alternatives is a potential driver for increased demand. The naming of the product category is also extremely important to future marketing efforts, with consumers more likely to respond to words associated with nutrition than with medicine (Childs & Poryzees, 1997). Childs and Poryzees (1997) recommend that government agencies design a

public information program to teach consumers new eating patterns; this is consistent with Jayanti and Burns' (as cited in Bhaskaran & Hardley, 2002) finding that education was crucial to altering consumers' eating practices. However, this approach does share semblance with the deficit model of understanding science.

There are some demographic variations amongst the various niches within the market. In the US, female consumers tend to be slightly more concerned about their health than male consumers and middle-aged and elderly consumers are significantly more concerned about their health than are younger consumers (Gilbert as cited in Bech-Larsen & Scholderer, 2007). Women's health orientation may be motivated by concern for family and older people generally experience more health problems than do younger ones (Verbeke, 2005). International differences in consumer preferences have been uncovered consistently in reviews for example, between US and EU consumers (Verbeke, 2005). Europeans were "more critical towards novel foods, novel food technology and food-related information" (p. 54). But even the European market is heterogeneous; Northern and Central European consumers are more favourable towards functional foods than Mediterranean consumers are (Menrad, 2003; Siró et al., 2008). However, very little research has looked at this area from a New Zealand perspective, which may be different again to those found overseas; these differences arise from the culturally embedded practises and beliefs about food, which may affect the market for functional foods in different places (Stewart-Knox & Mitchell, 2003). New Zealand, influenced by a unique blend of European, Maori, Pacific Island and more recently Asian culture, merits more local research into functional food, especially given the industry's reliance on promoting the health benefits of its products.

Health claims about functional foods. Arguably, the most important distinguishing feature of corporate communication about functional food compared to that for all other foods is the promotion of health claims. Williams (2005) reported on the US Congress' concern that such claims could potentially change whole markets to focus on health rather than taste, convenience and other features of food products. But Congress also thought truthful claims about diet and disease could help consumers make better food choices. In contrast, Harrison and Brown (2003) compared the health claims made for functional foods with their "everyday" equivalents that made no specific health claims. The authors concluded

that many manufacturers did not provide sufficient evidence and many claims proved "misleading" or "deceptive" and generally, the functional food products' benefits were overrated and the products were therefore priced unjustifiably high. Williams (2005) noted that this concern is shared by the American Medical Association, which argues that "lower-level" evidence will mislead consumers. At the same time, some countries have prohibited or severely restricted claims that link food consumption with prevention or treatment of particular diseases; however, these rules have not prevented a proliferation of soft claims, many of which have little or no scientific evidence to support them. Importantly though, some researchers have looked at how discerningly consumers read these messages.

Dodds, Tseëlon, and Weitkamp (2008) used focus groups composed of scientifically literate women (chosen because they worked as scientists or in a science institute) to measure how critically consumers may read functional food claims; the authors chose this sample assuming that if they had difficulty understanding then a lay public would struggle even more. The authors found that participants considered advertising messages about health properties of functional foods to be credible when they were kept simple and factual, and did not contradict previous knowledge. It was clear though, that participants brought their previous knowledge to interpret scientific and pseudoscientific claims. Not all consumers have a science background but they are still regularly confronted with health claims about food products. Eden (2011) used focus groups to analyse the way that consumers from non-scientific backgrounds make sense of functional and organic foods, finding that they draw on multiple sources of information to do so. She found a dichotomy between the two food types. Consumers associated functional food with science, processing and technology and in contrast saw organic food as natural, raw and unprocessed. They did, however, have to work hard to understand scientific information and preferred basic information as fuller more detailed scientific claims made no sense to them. Eden (2011) also found that consumers felt they understood organic food claims more easily, but many were misinformed thinking that organic meant that the actual product was 100 per cent pure (as in not tampered with through scientific means and free of chemicals, residue, pesticides, GM); however, regulations actually refer to the production process where a minimum of 95 per cent of ingredients must come from other

processes certified as "organic" for a food to be labelled as such. Interestingly, while consumers felt organic meant without science, they also wanted the organic status to be proven within a science lab by testing products for chemical residues or other contaminants, which illustrates the status people afford to science in general.

There are, however, some contradictions among various academic studies about consumer favourability towards functional foods. Jones and Jew (2007) for example, claim that functional foods with health claims "are eagerly accepted by consumers" (p. 387). But interestingly, consumers have not been found to base purchase decisions on business or scientific terms that explain the food's nutritional value. Hilliam (as cited in Menrad, 2003) found limited knowledge of the term "functional food" among British, French and German respondents, but largely favourable responses to the concept and to specific ingredients in functional foods. As such, foods that contain well-known functional ingredients like vitamins, fibre, calcium and iron are more likely to gain consumer acceptance than foods with lesser known ingredients such as omega-3 and flavonoid.

Bhaskaran and Hardley (2002) have also investigated existing consumer perceptions of functional foods, and tried to ascertain who they regard as trustworthy sources of information. The prevalence of varying scientific and promotional claims about these foods has added some cynicism to consumer attitudes (Silverglade as cited in Bhaskaran & Hardley, 2002). Generally, younger consumers are more concerned with taste, price, convenience and quality but older consumers are more likely to make purchase decisions based on the functional and health benefits of food, possibly due to the increased likelihood of actually suffering some health impairments. Across all ages, consumers trusted doctors, dieticians, educational institutes and family the most. Behaviour change was most likely to occur in older consumers, and change for any group was largely motivated by selfinterest (Bhaskaran & Hardley, 2002). Consumers did not display much regard for food companies and manufacturers as trustworthy sources of information, which is relevant to this study. They did view manufacturers' claims as good initial points of reference, but would then use other sources to compare and assess these claims. It becomes relevant, then, to examine the literature analysing organisational identity and sensemaking, and corporate communication messages.

Sensemaking, Identity and Corporate Communication

Conditions within this complex science and media environment have arguably helped the functional food industry grow and develop. Even though consumers are "confused", they are still willing to purchase. And while science and health professionals, the media and consumers are all obviously important stakeholders, the functional food producers themselves are significant market players too. Eden (2011) used food label research to show that consumers actively make sense of information about organic and functional foods and their level of trust is influenced by who has sent the message, that is the identity of the organisation: "For example, a label set up by producers, retailers or government to communicate clearly might fail to do that not least because consumers make sense of it literally through identity - who the promoters are" (p. 191). Eden (2011) states that many academics and government agencies are concerned about the way modern food technology and organisations create a divide between the producers and consumers, which hides information about what people are eating and its effect. Academic research about exactly "who the promoters are" has so far been limited and for this reason a communications perspective that looks at organisational identity, organisational sensemaking, and corporate communication can add something new to existing knowledge on functional foods.

Sensemaking in organisations. Organisational sensemaking rests on the premise that "situations, organizations, and environments are talked into existence" (Weick, Sutcliffe, & Obstfeld, 2005, p. 409). Sensemaking is founded in language, talk and communication and essentially asks, "what's the story?" (Weick et al., 2005, p.410). People in organisations cannot avoid the sensemaking process, even though they seldom – if ever – consciously engage in it. The process occurs retrospectively of issues, events or actions that people interpret or understand within an organisational context complete with multiple relationships with other actors; as Maitlis (2005) explains, sensemaking is a social process. Organisational members come to understand their environments by acting and communicating interdependently with other members, which allows the whole group to act collectively or in other words, to become organised. Consequently, Weick et al (2005) state that the organisation forms through sensemaking not the other way around. The process is about applying labels to various phenomena, which gain

consistency as similar occurrences to older ones continually re-emerge making them seem familiar and therefore consistent with the organisation's way of doing things. Hill and Levenhagen (1995) and Weick et al. (2005) stress that ultimately sensemaking is about action. Hill and Levenhagen (1995) explain that organisational members eventually act based on the understandings that are formed through sensemaking, but more importantly the new act is then made sense of and this information is fed back into the sensemaking process, guiding future actions. Communication is vital in the process as it brings tacit, hidden or private knowledge to the fore and allows organisational members to put it into a useable, clear and public form that is accessible to the whole organisation (Weick et al., 2005).

Of particular relevance to the functional food industry, Thomas, Sussman and Henderson (2001) apply sensemaking to "strategic learning". An organisation needs to concentrate its resources in key knowledge areas to create sustainable competitive advantage; this is congruent with Bröring and Cloutier's (2008) work on new product development with combined knowledge from the pharmaceutical and food industries. Strategic learning involves acquiring knowledge from outside the organisation, developing an issues template and engaging in dialogue to gain an array of understandings and interpretations of key events (Thomas et al., 2001). Thomas, Clark and Gioia (1993) studied the link between sensemaking and organisational success. They present sensemaking as a four-step process: scanning, interpretation, action and performance. Successful organisations were found to access a wide range of information internally and externally, although the type of information was less relevant, but external sources of information were more correlated with profit than internal ones. When managers perceived that they had control of strategic issues, they were more likely to extend the product and service range they offered. This is again relevant to the functional food industry with its high levels of research and development, which is intended to frequently introduce new products and improve existing products.

Weick at al. (2005) argue that sensemaking most frequently occurs when there is some sort of chaos or other situation where "the current state of the world is perceived to be different from the expected state of the world" (p. 414). They list such situations as discrepancy, surprise, disconfirmation, opportunity or

interruption. These instances all require some new way of understanding the organisation as they challenge the prevailing sense temporarily. But Maitlis (2005) argues that although sensemaking is necessitated during unexpected or dramatic circumstances, it is also quite an ordinary on-going process that occurs with multiple stakeholders over extended periods of time. Her study also looks at "sensegiving" which consists of attempts to influence the sensemaking process to favour particular organisational understandings or interpretations; this activity is therefore most often carried out by leaders but potentially sensegiving can be driven by any person and occur in any situation with interaction among or between stakeholders: "The intelligence of a collective mind depends upon the heedfulness with which people interrelate" (Weick & Roberts as cited in Maitlis, 2005, p. 22). Maitlis (2005) found that even in highly controlled situations, stakeholders actively engaged in sensegiving, contributing to and shaping the overall sense that was collectively generated. When leaders guided the process, especially towards a clear goal, the various stakeholders' accounts were "built upon" rather than "torn down" so in essence, the collective sense did incorporate the range of stakeholder experiences into the collective account. The many perspectives gave an account that was "rich" due to the many contributions. She also found that in instances where there was little leadership but high levels of interest, the various stakeholders produced highly varied idiosyncratic accounts with little overall integration and quite a narrow focus compared to the rich accounts that were gained collectively; Maitlis (2005) explained that this richness results from the broad range of individual experiences that the various stakeholders brought to the sensemaking process. Overall, this work shows that sensemaking is neither one overarching process nor a series of separate smaller processes but a hybrid of both. Individuals use their unique experience to make their own sense of phenomena but in proximity to other members of the same organisation these "senses" are coordinated enough for a collective sense to emerge. Importantly to this study, Mills (as cited in Weick et al., 2005) states that sensemaking is fundamentally important to organisational identity, and therefore action, as it forms the site where meaning is created.

Sensemaking, identity and image. The earliest definition of organisational identity is generally thought to be Albert and Whetten's (as cited in

Gioia, Schultz & Corley, 2000), which is "that which is central, enduring, and distinctive about an organization's character" (p. 63). However, Gioia et al. (2000) believe that Albert and Whetten's definition of identity does not adequately consider the dynamic and fluid nature of identification. Far from being "enduring", identity is changing continuously albeit incrementally. Christensen and Askegaard (2001) explain that traditionally, "identity" has been regarded as an internal construction, whereas "image" was seen to emerge from outside the organisation; however, they challenge the rigid separation between the two concepts because many internal activities, for example waste management or recruitment practices, have become topics of public discussion so the organisation is often inadvertently communicating to the public simply by conducting its day-to-day business.

Similarly, Dutton and Dukerich (as cited in Gioia et al., 2000) have defined corporate image as a wider concept incorporating organisational members' impressions of what outsiders think of the organisation, so conceptions of image feed back into identity and sensemaking processes as well.

One reason for the continuous change of identities is that the barrier between modern organisations' internal and external functioning has been breaking down for some time (Hatch & Schultz, 1997). Physical distances and issues of access once separated internal stakeholders like managers and staff, from external stakeholders like customers, regulators and the public, but organisations are losing the ability and/or the impetus to keep these areas distinct (Schultz & Ervolder, 1998). The increasingly ubiquitous and accessible new modes of communication facilitate interaction between internal and external stakeholders, which reduces the separation. This situation provides internal members of the organisation with more information about the organisation's image: what outsiders think of it. Stuart (1999) has described the interface between identity and image as a "moment of truth" for an organisation and notes that with the shifting boundary discussed by Hatch and Schultz, "the interface has become a blurry line" (p. 203). Subsequently, organisational members are more likely to be aware if their organisation's image does not match the reality/identity of the actual organisation. Weick et al. (2005) label such as mismatch discrepancy, surprise or disconfirmation and argues that it will activate organisational sensemaking processes that in turn affect organisational identity.

Moving further from the notion of a "blurry line", Gioia et al. (2000) have argued that organisational identity and image are so closely linked that careful consideration of both is needed in any attempt to understand any one of them. Similarly, Hatch and Schultz (1997) link both concepts to an organisation's culture, stating that organisational identity is culturally embedded. As such, organisations create "images" that are (consciously or unconsciously) born of the same culture and therefore saturated with markers of organisational identity. When organisational image is publicised the meanings are absorbed back into the organisation: "Who we are is reflected in what we are doing and how others interpret who we are and what we are doing" (p. 361). Organisational members encounter symbols and other images of their organisation even when acting in other capacities outside of the organisation, which feeds back into the culture and identity in a circular process that makes all three facets mutually dependent (Hatch & Schultz, 1997). This feedback gathers greater frequency and influence as the boundary between organisations and their environments break down.

The relationship between identity, image and contextual environment is conceptualised particularly well by Hatch's (1999) jazz-improvisation metaphor. The metaphor highlights "temporal, emotional and ambiguous aspects of organizational structure" (p. 97), and this way of looking at it is useful as structure is dynamic. Jazz is often regarded as "unstructured", but Hatch argues instead that it has "a structure that supports, but does not specify" (p. 83). In what is essentially a sensemaking process, the music has sufficient rhythm, harmony and melody to bring the musicians together to produce one complete, coherent song, but each player has considerable license to improvise. This situation encourages innovation and creativity whilst still allowing individual players to contribute to the goals of the whole group. The musicians need to accompany each other's solo efforts and work through a turn-taking process that allows all to contribute and none to be left behind. They must also listen carefully to one another for clues or suggestions about what to play and work together should a "wrong note" be played by any musician. No two performances of one song are the same, although they may share considerable similarities. Similarly, an organisational structure is not fixed, but changes over time sometimes incrementally and other times dramatically. Jazz performers also adjust their performance based on the audience's reaction, which

gives clues about the music's appeal, meaning that both jazz performance and organisational structure is context dependent and the relationship with publics is a key influence. The audience interaction is important as it gives the players information about the "image" of the music, allowing them to adjust the performance/identity should the image show it has fallen short of expectation: "This aspect involves thinking of organizational structure in terms, not of rules, but of communication" (p. 89). The dynamic nature of organisational identity is important because it means that the sensemaking process is continually in action and the organisation's identity can change quickly through influences and issues from the wider context it operates in. For this reason, the final part of this chapter explains the role of issues management and its impact on sensemaking, identity and image.

Sensemaking and the impact of contextual issues. Just as jazz musicians read the audience reaction for clues about what to play, organisations must scan their operating environments to assess potential complications and make strategic responses to them: a public relations function called issues management. Heath (as cited in Heath, 1998) defined issues management as "the management of organizational and community resources through the public policy process to advance organisational interests and rights by striking mutual balance with those of stakeholders" (p. 274). Kuhn (1997) notes that issues management efforts are "inevitably rhetorical acts" (p. 189) that aim to make the public view the organisation more favourably. This focus on language and communication differs from the consumer-oriented marketing approach that much of the existing stakeholder research around functional foods has taken. Public trust in science, public understanding of scientific claims, and poor public health could all potentially be *issues* that affect functional food producers should the public and other stakeholders perceive the issues as significant.

Carroll and McCombs (2003) state that public awareness of issues primarily comes from the media and the strongest indicator of issue importance is continual news presence, which incidentally science (De Semir, 2000), health, and food-related (Rowe, 2001) stories already command. Because they highlight and/or downgrade various facts and opinions within news stories, the media can also affect how negatively or positively members of the public perceive organisations (Carroll

& McCombs, 2003). This media influence is important because social issues can exist only if societies perceive and define them as such (Lamertz, Martens & Heugens, 2003); this does not mean that issues do not involve facts but it does acknowledge the active roles of stakeholders who socially construct each issue (Weick as cited in Lamertz et al, 2003). Organisations, for example, use public relations strategies or "information subsidies" to make news gathering less expensive for media organisations, thus influencing the news agenda and by extension the public perception of the organisation's image (Carroll & McCombs, 2003). For example, Darmon, Fitzpatrick and Bronstein (2008) found that Kraft capably responded to the growing issue of obesity in America by becoming the first packaged-food manufacturer to launch a public obesity campaign. The company received predominantly favourable media coverage throughout and largely achieved the four main objectives of issues management: protecting profitability, influencing public policy, creating good organisational policy, and enhancing stakeholder relations. Obesity is one of a range of health complications that various functional food companies have attempted to address so potentially issues management campaigns like Kraft's could be replicated but media coverage and image-enhancing public relations communication are not the only organisational processes affected by issues; issues can also affect sensemaking and identity.

Issues management ideally is not only about altering the environment, but it is also about changing the organisation's practices to make them better matched with the public's expectations about what the organisation can and should be (Pratt, 2001, p. 336). Pratt's claim shares some logic with organisational sensemaking. The existence of an issue does not automatically mean the organisation will, can or should change but as issues present threats to the organisational view of what the world should be like (Weick et al., 2005) they activate the sensemaking process by providing organisational members with motivation to actively re-examine the organisational identity. So while a collective understanding of identity provides temporary stability, environmental factors can produce an "identity threat" that disrupts the status-quo by altering the way key internal stakeholders interpret relevant events and information (Lamertz et al., 2003). Lamertz et al. (2003) explain that when an issue becomes threatening enough, organisational members will construct an "issue definition", which is their own interpretation of the

problem and what could resolve it. They will likely define the issue in a way that helps them understand the threat and preserve their status within the structure. However, some issues become so significant that internal and external stakeholders must intervene and key organisational actors must collectively frame the problem so that it guides a shared sensemaking process. Importantly, Stryker (as cited in Lamertz et al., 2003) acknowledges the "reciprocal interdependence of actors and their social environments" (p. 90), which means neither the news agenda nor the public's reaction can be ignored during this process.

Conclusion

The academic literature in this chapter has examined the public's steadfast respect for scientific research and findings, and the significant contribution that news media and public relations practices make to provide the public with vast amounts of health news and information as it is discovered by scientists. The literature also shows the public's irritation with the sheer volume of information and the confusion that this information causes. Consumers with poor health literacy are possibly suffer more confusion, which may facilitate poor nutritional choices and subsequently more frequent incidences of chronic illness. Consumer research indicates that there is now generation of consumers with poor health and high disposable incomes, who are attempting to improve their health but do not necessarily understand health-related claims about functional food. Under these conditions, the functional food market is continuing to grow as consumers worry more about their health, and functional food producers offer them more solutions. Offering consumers such solutions inevitably requires organisations to devote resources to corporate communication, which is heavily influenced by organisational identity. Identity and image are intricately related and influenced by contextual issues and internal stakeholders' sensemaking processes, as organisations deliberately attempt to manage their images and issues that may affect them. Organisational images can be reflected back into sensemaking processes as can issues that threaten existing notions of organisational identity. The ideas discussed in this chapter will be used to address the following three research questions and examine the identity and image of the case study organisation as it encounters these particular contextual issues affecting the functional food industry.

Research Questions

- 1) How do internal stakeholders of the case study organisation make sense of the organisation in the wider social, political and economic context, particularly regarding health issues?
- 2) How does the case study organisation use strategic public relations communication to contribute to, communicate with, and manage the social, political and economic environment?
- 3) What consistencies and contradictions exist between the case study organisation's organisational position and the key themes and messages in its corporate communication messages?

Chapter FOUR - Methodology and Method

This chapter explores the methodological choices of the research process and explains the rationale behind them. The study is qualitative and uses more than one method of data collection and analysis. Previous studies have used qualitative research to study organisations that produce functional food products. Stewart-Knox and Mitchell (2003) conducted a relatively similar study in which they interviewed an organisation's staff about their work developing reduced and standard fat food products: "The qualitative approach also strengthened the research in that it ensured that a complete set of variables was entered into the eventual model not just those considered important by the researchers" (p. 61). This point proposes that the qualitative data-gathering process allows the research subjects more flexibility to provide information that they, as the people closest to the phenomena being studied, believe are most relevant. This chapter first outlines the methodological considerations, explaining the underlying assumptions and values of an interpretative perspective, the strengths and weaknesses of case studies, and the principles of the methods of data analysis used in this study. Finally, this chapter explains the specific data-collection process in this study.

Methodological Considerations

Prasad and Prasad (2002) describe a "coming of age" of interpretive organisational research, which is driven by its ability to uncover knowledge that can be left unnoticed by traditional, quantitative methods. In this study the interpretivist approach is applied to a case study and the data is analysed by drawing on three complementary methods of data analysis: thematic analysis, generative criticism and rhetorical-dialectical analysis.

Interpretivism as a perspective. This study takes an interpretive approach that asserts "that understanding is not something we acquire alone" but rather "ways of understanding are cultural, they are shared by many, they pre-exist individuals yet they are not fixed or given" (Hackley, 2003, p. 91). This view acknowledges the inherent social aspect of generating knowledge, asserting that humans cannot know things in insolation from other humans nor can they acquire

new knowledge without other people to talk to; the ability to communicate is gained through social interaction. Sandberg (2005) explains that interpretivist researchers are generally sceptical of universal, empirical truths, arguing instead that "truth" is a social construction that is talked into existence as people negotiate and debate with one another about "the very nature of reality" (p. 45). As such, "truth" is a temporary construct of something that people happen to agree on at a particular time. But this does not mean that there are no criteria that can be applied to qualitative findings to give confidence that the research has in fact found something that is "known" rather than opined or surmised (Wachterhouser as cited in Sandberg, 2005) because allegedly "subjective" truths made by agreement do translate into "real" consequences. Sandberg (2005) uses the example of daylight savings time, as people "agree" to move the clock forward by one hour, but anyone who disagrees to do so will quickly find him/herself out of touch with other subjects and unable to competently complete many of life's daily activities; therefore, this idea of time may be socially constructed but it still has quite noticeable and practical consequences.

Gummesson (2003, p. 482) argues that all research involves interpretation along the way and there is no point pretending that this is not the case: "Let's stop fooling ourselves: All research is interpretive!" The main advantage of using a qualitative/interpretive approach over a quantitative one is that the data are "far richer" (Gummesson, 2003) and can deepen "our understanding of, among other things, the symbolic dimensions of organizational life" (Prasad & Prasad, 2002, p. 4). So rather than simply counting how often or how frequently particular communication phenomena occur, a qualitative approach attempts to explain how these acts occur and what they might mean. The specific strength of interpretive analysis come from its ability to explain the phenomena based on the interpretation of the data (Drake, Shanks & Broadbent, 1998). The interview data are records of the language used to describe and "make sense" of the organisation and its role in producing and selling a "healthy" food: "We are constantly involved in negotiations with other subjects about reality in terms of our intersubjective sense making of it" (Bengtsson as cited in Sandberg, 2005, p. 47).

Interpretation is unavoidable in any communication and equally a researcher cannot be 100 per cent certain that his/her interpretation of a text

matches the meaning the sender intended (Taylor and Van Every, 2000), so any findings and subsequent discussion presented in this or any other organisational communication research must be discerningly read. However, Taylor and Van Every (2000) also point out that the archetypal nature of language is precisely what allows it to function, so while acts of language interpretation accuracy may not be guaranteed, their semblance is likely strong enough for the research to produce something of value.

Case study as a method. This research uses case analysis of one organisation rather than a broader industry analysis for several reasons. In qualitative research a "case study concentrates on experiential knowledge of the case and close attention to the influence of its social, political, and other contexts" (Stake, 2008, p.120). In an organisational communication and public relations study, the context is very important because the organisation is trying to manage the various relationships with stakeholders within a wider framework. Organisations do not exist in vacuums, but as one of a range of actors competing for a particular cause. This approach also fits well with sensemaking theory, which argues that organisational members converse to reach a common goal: "The practical effect of the communication is to establish a basis of action and to maintain the coordination of members of the organization in responding to a mixed material and social environment" (Taylor & Robichaud, 2004, p. 397). Using a case study allows one to see the way the members work towards a goal, and make internal sense of it, relative to the wider context; Halinen and Törnroos (2005) note that "the underlying idea for case research is said to be the many-sided view it can provide of a situation in its context" (p. 1286).

The case study method is well suited to research involving contemporary phenomena within a particular context (Drake et al., 1998), especially where there is little existing research or the main area of concern is relatively new. In this case, the functional food industry is new and there have so far been very few studies conducted with a public relations or communication focus, and as such a case study lends itself well to the specific focus on functional foods that this study has. The case study also provides insight where the experiences of individuals are critical to or the focus of examination (Yin as cited in Darke et al., 1998). Sensemaking as a process that individual people conduct to form a collective sense can also be

evaluated well through a case study method. The "unit of analysis", normally an individual, group, or organisation, determines the scope of the "case", which must be directly related to the research question and be of sufficient size to provide enough data for the analysis (Yin as cited in Darke et al., 1998). The selected case subject is small enough to be able to be analysed well in a project of this size, but still big enough to have influence on the functional foods sector in the context of New Zealand.

The goals of the research should govern the number of cases that any project requires. Using fewer cases allows for in-depth focus and vigorous depiction, whereas using multiple cases helps build theoretical description and allows for cross-case analysis (Yin as cited in Darke et al., 1998). However, a major limitation of the case study is the inability to make generalised claims from the findings (Gummesson, 2000), as it is unlikely that a single case can represent the whole population from which it originates. Involving a single case, this study cannot claim to find generalisable claims of wider trends or patterns in its own right. However, Yin (as cited in Gibbert & Ruigrok, 2011) claims that case studies can contribute to "analytical generalization" (adding to and developing theory) when viewed in conjunction with a number of other case studies; Eisenhardt (as cited in Gibbert & Ruigrok, 2011) argues that between four and ten cases can be cross-analysed to build more generalisable theory, and as such this may be by follow-up studies. Most importantly to this study, Stake (as cited in Tellis, 1997) maintains that an "intrinsic" case study has value because it is interesting in its own right.

Considerations in data collection. Interviews are the first method of collecting data for the study. Gubrium and Holstein (2001) note that using interviews to uncover knowledge is a recent but prevalent phenomenon: "The interview is being reconceptualised as an occasion for purposefully animated participants to construct versions of reality interactionally rather than merely purvey data" (p. 14). The respondent is believed to own (at least part of) the various stories he/she tells and as such this is a possible way of finding out how important decision makers within the functional food industry make sense of the organisation's role and place within it. However, Gubrium (as cited in Gubrium and Holstein, 2001) has even questioned whether people's stories are actually their own, or if they come from the organisation, such is the organisational impact on

meanings and understanding. What is important to this study is that the descriptions will have inevitably drawn upon organisational discourse, in which case the process of sensemaking can be found and analysed. In their previously mentioned work on organisational image and identity, Brown, Dacin, Pratt and Whetten (2006) make a point of recognising that "organization members occupy a special position from which to view the organization" (p. 102) and this forms the basis of the viewpoint the authors call "identity". As such, the data from the interviews provides a measure of identity and an example of the sort of thinking that informs the organisation's decisions and communicative actions, which can then be analysed with the guide of sensemaking theory. The use of interviews is consistent with the sensemaking premise that "situations, organizations, and environments are talked into existence" (Weick et al., 2005, p. 409); the "talk" from these interviews is considered symptomatic of the organisation and its values.

For practical reasons the interviews in this study were conducted by telephone rather than face to face. Research comparing the two methods has provided evidence that even without allowing for non-verbal cues, telephone interviews are still a reliable method of gathering quality data. Carr and Worth (2001) note that a number of studies comparing telephone and face-to-face interviews have found the data produced by the two methods are generally as good as each other. Robson (as cited in Carr & Worth, 2001) found that telephone interviews have some benefits that face-to-face ones have, including the ability to clarify and explain questions and answers, and use probing questions. Telephone interviews also have some advantages over face-to-face interviews, such as the decreased likelihood that interviewees will modify their answers to make them more socially acceptable, and the lower cost. Lavrakas (as cited in Carr & Worth, 2001, p. 513) argues that most important advantage of telephone interviews is "the opportunity it offers for quality control." Frey (as cited in Carr & Worth) claimed that the practical and social function of the telephone provides the interviewer with an advantage: the people more likely to give undivided attention; they are unlikely to hang up without explanation; both speakers feel obliged to actively participate; and phone conversations rarely consist of silence.

Data analysis. The data was primarily analysed thematically but this method was enhanced by drawing on the principles of generative criticism, a

rhetorical analytical method of investigating qualitative data, and rhetoricaldialectical analysis, which is useful for analysing areas of tension.

Thematic analysis. Thematic analysis is a research method that identifies patterns and recurrent ideas from within data; it can be thought of as organising data into like sets illustrating the major congruencies (themes) from across the corpus (Braun & Clarke, 2006). "Themes" then "are less a set of cognitive schema than a limited range of interpretations that are used to conceptualize and constitute relationships" (Owen, 1984, p. 274). Owen (1984) offers three criteria for a theme to exist within a data set: recurrence, repetition, and forcefulness. Recurrence requires a theme to emerge on more than one occasion and is used to determine whether or not the idea resides in the foreground or the background of the data. An idea in the background may still be important to understanding a theme but may not constitute a theme in its own right. Repetition is closely related to recurrence but is more focused on individual words. Forcefulness refers to the way in which the research subjects delivered their messages most notably through intonation, volume and enthusiasm.

Braun and Clarke (2006) state that one of the major advantages of thematic analysis is its flexibility, which allows the researcher considerable freedom to analyse the data; this can also be a significant source of criticism as a lack of formal rules produces an "anything goes" approach where the researcher may find exactly what he/she wanted to find. Braun and Clarke (2006) also argue that the best thematic research is focused on the research question at hand and uses the data rather than the interview questions to find the themes. The particular advantage of thematic analysis in this specific study is that themes can be derived from both the interviews and the information from the public relations and marketing communication. This means the relationship between the two can be discussed based on the same unit of analysis even though the themes may be different in each.

Other related studies have used thematic analysis to achieve useful research outcomes. Roberts and Pettigrew (2007) used thematic analysis to provide a richer understanding of major messages delivered through food advertising aimed at children. While their initial content analysis highlighted the frequency of particular words and ideas, the thematic analysis illustrated the ways in which these ideas were linked together and the underlying assumptions that may be less explicit

than individual words but more pervasive across multiple food advertising campaigns. And Gough and Conner (2006) used thematic analysis to identify two major beliefs that prevented men from pursuing a healthy diet: scepticism of messages and motives behind public health campaigns, and a perception of healthy food as bland and unsubstantial.

Generative criticism. While a thematic analysis is useful for its flexibility and broad boundaries, it potentially misses out on some of the more important and interesting facets of qualitative research in public relations. Cheney and Dionisopoulos (as cited in Heath, 1993) state that "corporate communication (in practice and in theory) is fundamentally rhetorical and symbolic" (p. 144). Skerlep (2001) laments the limited attention paid to rhetoric in much of the dominant public relations research and argues that field of rhetoric enhances public relations research considerably as it facilitates "the discovery of persuasive arguments" (p. 182). Kock (2008) states that rhetorical acts centre on the site of a particular set of issues: "those concerning choice of action, typically in the civic sphere" (p. 62). This is important because many professional communicators are working to justify or support a particular position or persuade a particular public to believe a certain idea and/or act in a certain way. In doing so, internal stakeholders are also actively sensemaking to establish the organisation's position and therefore identity relative to the issue being contested (Weick et al., 1995). Heath (1993) argues that a rhetorical perspective used in public relations "captures the meaning that shapes the social reality by which people have similar thoughts, contest points of view, make judgements, and regulate their behaviour and that of others" (pp. 142-143). With its focus on the specific use of symbols to facilitate communication and persuasion, rhetorical analysis allows a closer look at the level of the text (Foss, 2004), revealing insights that may not necessarily be uncovered with pure thematic analysis. Generative criticism is the specific method of rhetorical criticism used in this study.

Generative criticism differs from other methods of rhetorical analysis in that the artefacts themselves are used to determine the units of analysis rather than a formally prescribed method of analysing data (Foss, 2004). This approach is congruent with a thematic analysis that employs "inductive coding" which allows the themes to "emerge" from the data (Fereday & Muir-Cochrane, 2006).

Generally, rhetorical analysis is heavily influenced by the work of Burke (as cited in Livesey, 2002), who argues that "symbolic action" largely forms human understanding and it is language that shapes human relations. Traditional notions of rhetoric are embedded in Burke's view, which means that such symbolic action is generally conducted with persuasive intent. "The urge to identify derives from the human ability to respond to symbols and from an intrinsic biological need of human beings to overcome division" (Burke as cited in Livesey, 2002, p. 120). As such, human interactions are a continual series of persuasive communicative acts, which constantly negotiate and renegotiate agreements that cannot be regarded as fixed indefinitely, although some will remain for longer than others. Burke argues that symbols are the only way that humans can come to make sense of the world and "wherever there is 'meaning,' there is 'persuasion'" (as cited in Livesey, p. 121). Interestingly, Burke sees a dialectical relationship between individuals and society, and also states that division and hierarchy are important components of human relations. Language opens up a number of paradoxes and ambiguities, but these are opportunities for change and negotiation. And it is these paradoxes and ambiguities that are also explored in the research project. Communication use to persuade consumers of the benefits of functional foods opens up a point of negotiation in which, as mentioned, a change of mind set is required that would view these particular foods as "good".

Rhetorical-dialectical analysis. As generative criticism is a rhetorical technique, it harmonises well with rhetorical-dialectical analysis, which is the third method considered in this study, although to a lesser extent than the other two. Rhetorical and dialectical approaches have traditionally been divided in two separate and distinct realms, even though they both have Aristotelian origins. Rhetoric was seen as the ability and capacity to persuade others to a particular point of view and over time held close association with aspects of style (Van Eemeren & Houtlosser, 2000). Conversely, dialectic was seen as a process for finding truth, which heavily relied upon concessions from opponents engaged in dialogue. In this case there needed to be a system of communicative exchanges of claims and counter-claims until a final position of "truth" had been reached. So while rhetoric was supposedly stylistic, dialectic was supposedly logical (Van Eemeren & Houtlosser, 2000).

Benson (1977) explains that a dialectical approach "offers an explanation of the processes involved in the production, the reproduction, and the destruction of particular organizational forms" (p. 2). There are four main components of dialectical analysis: "social construction, totality, contradiction, and praxis" (Benson as cited in Seo & Creed, 2002, p. 225). Social construction refers to the patterned nature of relationships formed by human relationships and interactions, in which meaning and understanding are socially created products. Totality holds that no social construction exists in a vacuum, but rather is part of a complex web of other constructs that feed into and create new ones; no construction has a clear end or start point, but rather they cross a series of overlapping points. Contradiction means that the various social constructs have ambiguities, inconsistencies and fractures, which are sites of tension and disagreement that may create change or structure understandings (create new constructs). Praxis acknowledges individual human agency, and is "the free and creative reconstruction of social patterns" (Benson as cited in Seo & Creed, 2002, p. 225). The four elements cannot be feasibly seen as independent parts, but should be viewed together as a framework for understanding social actions. They can also be used to analyse organisational life. The socially constructed nature of organisations and communication provide an abundance of contradictions and tensions in which reality continues to be reconstructed. The dialectical approach can therefore be used to provide insight into the complex array of socially constructed meanings.

Johnson (as cited in Kock, 2008) claims there are three key differences between dialectical and rhetorical approaches. Rhetoric considers ethos (credibility of the communicator) and pathos (emotionally constituted appeal) whereas dialectical is primarily concerned with logos (logical appeal). Jacobs (2000) notes that independently the approaches have some flaws: rhetoric can focus too much on symbols that ignore wider systems and dialectic can see only arguments, labelling any utterance as an assertion if it could be viewed as such in any way. He argues that there is synergy to be gained from using both: "Dialectic searches for truth; rhetoric makes truth effective" (p. 261). In spite of the difference over logic, they both look at argumentation as a form of social practice that is used in political situations to reach agreement. They focus on the use of language in these situations. And they both look at the role of institutions in communication and

argumentation. Therefore, "it may be less important to emphasize the differences between these two approaches than it is to find a way to organize their common themes" (p. 262). Dialectic analysis can also uncover tensions among and within the diverse agendas of the functional food industry, the public, government and other stakeholders. And at the same time, rhetorical analysis can investigate the persuasive messages by the case study organisation delivered about topics where there is no obvious tension.

Research Method

This final section outlines the way the methodological approaches were applied to collect and analyse the data.

Selection of case study organisation. I approached the Head of Sales and Marketing at a functional foods conference after he had presented on EnZed Salmon's behalf. The conference presenters included representatives from privately owned manufacturers of functional food products, and food science researchers from universities, and crown and private research institutes. Any of the food-producing organisations at this specific conference were potential cases as producers of functional foods, but all case study research is limited by practical considerations including purpose, availability of resources and required deliverables (Drake et al., 1998). This company was a good fit with the goals of the study as it uses corporate communication to present a specific science-based argument for consumers to buy and use its products. The Head of Sales and Marketing was also very co-operative and willing to help arrange access to other interviewees and the company works with Masters-level students fairly regularly, especially those completing science degrees.

Drake et al. (1998) state that the research project needs to be relevant and useful to the participating organisation to get agreement; the more interesting and enlightening the study is, the more likely the organisation is to willingly provide the researcher access to the people and information he/she needs to complete the study. The researcher should, ideally, show the participating organisation what it will gain from the study and take necessary steps to work through any concerns the organisation might have. Although the Head of Sales and Marketing said the company produces a lot of its own research anyway, he was interested in the

findings from the research and the opportunity for the company to build relationships with a different university (University of Waikato) and be involved in a different field of study as it had already built relationships with people from science faculties in two other New Zealand universities (University of Auckland and Massey University). As a medium-sized business, EnZed Salmon's size suits this study well as it is large enough to have a significant corporate communication programme but it is still small enough that a complete "case" does not require an unmanageably large number of interviews. The vast majority of the managers also work in New Zealand, which is also an important practical advantage.

Data collection. The data collection involved two separate stages necessitated by the particular research objectives of the study. The first stage involved interviewing managers from the organisation with the main focus being collecting data that would help build a picture of the organisation's identity and how its members make sense of it. Hatch and Schultz (2007) argue that "increasingly, the actions and statements of top managers simultaneously affect organizational identity and image" (p. 356). The interviews were arranged through the Head of Sales and Marketing in a purposive sample in which he identified and provided contact details for the main managers from across the range of functional areas in the organisation. There were ten interviewees in total from the areas of marketing, production, human resources, exporting and sales, as well as the company CEO.

Researchers generally conduct semi-structured interviews face to face (Sturges & Hanrahan, 2004); however, this research used semi-structured interviews conducted by telephone as the main method of collecting data. The interviews were semi-structured to allow the respondents to freely explain their positions but the questions were primarily concerned with the role the organisation, and similar organisations, have in wider economic, political and social context. The main concern that researchers have about telephone interviews is the inability to read social and non-verbal cues in the responses (Sturges & Hanrahan, 2004). But in this case, the geographic spread of the interview subjects made telephone interviews more practical than face-to-face interviews. The interviewer was based in Hamilton, New Zealand, while the interviewees were located in Auckland and Nelson, New Zealand and in Sydney, Australia. Using the telephone was the best way to garner

valuable information from interviewees who would not have been reachable using face-to-face method (Miller as cited in Sturges & Hanrahan, 2004), given the financial limitations of the data collection. The interviews ranged in length from 15m: 26s to 43m: 19s and had a mean time of 29m: 32s.

The second stage of data collection focused on finding public relations and marketing communications documents or "artefacts" that the company uses to present its image to potential consumers and encourage them to purchase its products. The data are a purposive/convenience sample, in which the artefacts were chosen for being readily available to consumers, media and other stakeholders and were produced by the organisation for a specific communication purpose likely to affect its image. It was considered that if the documents were readily available to the researcher then consumers and other stakeholders too would have little difficulty accessing them. The artefacts used to evaluate the organisation's image came from several publications used by the organisation over a period of nine months from November 2010 to July 2011; this time period was chosen as it gives a manageable number of publications and the start and end dates fall either side of the interview dates, which means the same contextual issues affect both data sets. The publications include ten press releases that have been archived on the company's website, consumer-targeted information accessed from the website during the time period, and recipes from internet and printed/in-store sources.

Data analysis. The interviews were transcribed by a professional transcriber and checked by the researcher for accuracy. To elicit the themes, I edited the transcripts so that only answers that referred to the company remained. I removed questions and comments made by myself as well as interviewee's clarifications of questions, yes/no answers, references to colleagues who may help with further information and other general conversation. The mean length of usable utterances from the interview data was 2,703 words. The lengths ranged from a maximum of 5423 words to a minimum of 653 words. To test for the thematic criteria of recurrence key words were counted using Microsoft Word find tool and entered into a spreadsheet so that the frequencies could be compared and the major themes revealed. Key words were checked to ensure they matched the themes rather than another meaning; for example, the word "flavour" was not counted from this line from the Human Resources Manager because it is not about

the feature of the product: "We do try to get in there, a flavour of what our culture is like as an organisation." The analysis revealed some twenty-three possible themes of which three major themes could be determined through an iterative process of grouping like ideas. The themes were then discussed with reference to the theory from the literature review and the considerations of the two other analytical techniques.

The themes from corporate communication documents were analysed in much the same way, except that the themes from the first analysis were used as a starting point. These documents were deliberately checked for other themes as well for the specific purpose of addressing research question three, which investigates the consistencies and contradictions that exist between the case study organisation's organisational position and the key themes and messages in its public relations communication.

Conclusion

This study uses an interpretive approach that focuses on the way language and talk constitutes organisational reality, which is congruent with the principles of sensemaking theory. It uses a case study organisation chosen because it fits with the goals of the research and provides an interesting site for discussion. The three analytical techniques share considerable similarities and while the data will primarily be organised around themes, generative criticism and rhetorical-dialectical analysis assist the examination of language, persuasion and tension around issues, which are key considerations of the study.

Chapter FIVE – Findings and Discussion

Three prominent themes emerged from the interview data: health and wellbeing, premium quality, and sustainability. This chapter first outlines each of the three major themes separately but at the same time discusses lower-level or background themes that emerged congruently from the same data; these secondary themes often relate to more than one of the three major themes, and this illustrates the symbiotic relationship of these three themes. The themes are discussed with reference to relevant literature regarding the contextual issues around functional foods such as science communication, features of the functional food market, health literacy and health claims. This discussion provides a platform for addressing research questions one and two by conceptualising the wider social, political and economic context the organisation operates within, particularly regarding health issues. Following the discussion of the three major themes, I use identity and sensemaking theory to explore the way in which key features of all three themes are understood by internal stakeholders of the case study organisation and contribute to the creation of an organisational identity. The discussion of identity illustrates the way these stakeholders make sense of the organisation in its wider context (RQ1). I then use corporate communication theory to discuss the findings from and analyse the organisation's use of strategic corporate communication to contribute to, communicate with, and manage the social, political and economic environment (RQ2). Finally, this chapter examines the consistencies and contradictions that exist between the case study organisation's organisational position and the key themes and messages in its public relations communication (RQ3).

First Major Theme: Health and Wellbeing

The most frequently recurring theme in the interview data was "health" indicated by a total of 104 utterances, including derivatives such as "healthy", from the ten interviewees, ranging from two utterances (Manufacturing Manager) to twenty-six (Head of Sales and Marketing). Many ideas relating to this theme were generated largely unprompted when managers were asked to describe the product and its attributes; however, the idea of health was not often isolated but something

that was a key part of an overall package. For example, the CEO called it "the best of both worlds; you can have something that's delicious but it's actually pretty good for you." The National Sales Manager also endorsed the healthiness of the product:

I guess the nutritional panel if you like, the nutritional sort of analysis would be positive versus other comparable products. So for example, if you are comparing with other proteins we have less saturated fats, high levels of omega-3 oils, good poly and mono-saturated fats, quite a good fatty profile. It's high protein obviously; overall, it comes out as a pretty, almost a super food really. – National Sales Manager The idea of a "super food" is important to the study of functional foods because it is often used for marketing purposes with a similar intended meaning to the term functional food.

Omega-3 health benefits. The high levels of omega-3 found in king salmon make the product "functional". Omega-3 is a fat that scientists have linked to a number of health benefits including improved brain and heart function. Omega-3's importance to the organisation's members is illustrated through some thirty-nine utterances; only the Human Resources Manager neglected to mention it, which may be because her role focuses on staff rather than the product and she may come across it less often. The CEO stated that per gram, the omega-3 levels in king salmon are twice that of Atlantic salmon. The manager of the breeding programme said there was a lot of evidence to show that omega-3 is good for brain function, skin health and "good for everything".

Scientific research and health. EnZed Salmon works with a number of science and research institutions with specialist research capabilities that assist the company learn and talk about omega-3 and its health benefits. To this end, the company is very involved with the omega-3 research centres, distributing reports that the centres produce, contributing to medical databases, and spreading the word about the benefits of omega-3 and fresh salmon. If the company did not engage in scientific research to make health claims about salmon, then technically the product could not be classified as a "functional food".

The Marketing Manager said EnZed Salmon had built relationships with the University of Auckland and Massey University: the two universities with the most developed food science programmes in New Zealand. He said that the company involved itself with "whatever we need to", which includes providing fish for testing,

giving information and delivering research results to doctors and other stakeholders who need to see the results of clinical trials. The Head of Sales and Marketing said the company regularly works with the universities as well as Crown Research Institutes and assists projects funded by the Foundation for Research, Science and Technology, which will soon become the Ministry of Science and Innovation. The Marketing Manager and the Export Marketing Manager stated that the company also works with the Omega-3 Research Centre based in Australia, which tries to raise awareness of omega-3 and encourages consumers to eat more of it. EnZed Salmon also works with a number of dieticians and nutritionists; the Heart Foundation; Agriculture NZ; private research institutes, a number of university students, especially those conducting Masters research; and other experts in the health industry. These institutions and experts from the scientific community are essential to provide the evidence the company must have to make health-related claims about its food:

One of the regulatory things there is the fact that because we're a manufacturer, we're not allowed to quote it until we've done our own clinical trials. So we've got to ride on the back of other research and run by the skin of your teeth sometimes on some of the claims we make. - Marketing Manager

Such FSANZ regulations are an example of how general regard for "science-ingeneral" (Kallerud & Ramberg, 2002) is reconstituted. To protect consumers from untrue or inaccurate claims, regulators insist on scientific trials to establish a causal relationship between the food consumption and claimed outcome before the message can be made public, which adds to the volume of scientific information. It is difficult to argue that firms should be able to make such claims with no evidence, so the amount of information will continue to grow. However, the value of omega-3 to consumer health is an example of "science-in-particular" and is, according to Kallerud and Ramberg (2002), more likely to be questioned by members of the public.

Interestingly, one of the managers specifically linked the general health value of food and the need for it to be proven scientifically. The Head of Sales and Marketing stated that healthy food must have some kind of intrinsic, provable benefit. The proof needs to be in something written like a scientific report or

journal and the benefit needs to be obvious when actually consuming the food and he gave an example from his own product:

If you're a bit moody, and we tell people that salmon will improve their mood because of the omega-3 content. People will probably notice that their mood improves. That's the sort of proof that a lot of people like...I'm okay about just reading it. I'm one of the few people that read the newspaper and look at who wrote it, look who wrote the article: was it from a reputable news source? Was it from a news bureau I trust? Or was it just from an organisation in the United States, a PR machine, a government PR machine. For me it's very much what the source was...I will want to know what the authority comes from. – Head of Sales and Marketing

This response reveals a privileging of information that is authored by quality researchers and institutions. The manager's trust in these organisations may stem from the fact that he works with them regularly and knows them better than most consumers would. Presumably, one reason for the public's willingness to question particular scientific claims comes from their own experience. So as the Head of Sales and Marketing opined, if members of the public try the product and do not notice a positive change in mood or other claimed benefit, then they are more likely to dismiss the scientific finding and make their own judgement and according to the Export Sales Manager, there are signs that consumers are questioning issues about their health already. He stated that consumers generally were very concerned about where their food came from, although New Zealanders were slightly more apathetic than people in some other countries:

It's probably a much higher priority in a place like North America where it is so industrialised over there and when you get squeezy cheese and cheese doesn't come in a bottle that you squirt out; people know that. They're really questioning, where does their food really come from? What is in there and the likes of what in, the scares coming out of China I think people are really want to see that there are some good solid controls and conditions around what is healthy. Where does my food come from? - Export Sales Manager

This response makes a clear link between health and food consumption and illustrates the apparent motivation amongst consumers to know more, which may again mean more scientific research is conducted.

Scientific studies about omega-3 *capsules* are another important source of information for the company, as the Manager of the Australia Division explained:

Massey University studies have got that 140gm of our salmon would be the same amount of long-term omega-3s as nine fish oil tablets, which is a big deal for a lot of people who go wow, "so all I need to do is eat salmon instead of fish oil tablets?" Well absolutely, you know 'cause they're like popping fish-oil tablets, which depletes the ocean of natural resources as opposed to doing it the natural way. – Manager of the Australian Division

This research and the stated reaction from some consumers are consistent with Eden's (2011) findings on how consumers made sense of functional and organic food. Here, the more natural product (fresh salmon) is seen as healthier than the processed or scientifically created one (omega-3 capsules), but there is still an apparent need to have the natural product's benefits confirmed through scientific testing. This need possibly illustrates the pervasiveness of general trust in science.

The question of natural food versus dietary supplements is potentially an important issue for EnZed Salmon to work through should functional food and nutraceutical legislation be enacted. The Export Sales Manager felt that the company would be actively involved "if it's a chance for us to tell our story". He stated that his industry and the dietary supplements industry may disagree, "perhaps diametrically", about the best outcome for this legislation because EnZed Salmon would encourage consumers to take their omega-3 intake naturally, whereas the dietary supplements lobbyists would obviously prefer people to take a capsule or tablet. The clear financial interest that each side has regarding the issue creates a tension that they must address because of the potential for legislation impact the way they are able to promote their products; it may well come back to science to prove which product is better for the consumer, or EnZed Salmon may argue that its product is natural and therefore not constrained by the current law anyway.

Health issues in New Zealand. The managers were asked to explain what they believed were the biggest health issues facing New Zealanders, identify possible solutions and say what they thought their organisation could or does do to help combat the issue. These health concerns are potential issues that the company may choose or be forced to address in some way.

Health issue one: Obesity. The majority (five) of the managers considered obesity to be the main food-related health issue in New Zealand. The manager of the breeding programme stated that because New Zealand efficiently produces a

number of foods with high levels of saturated fat such as beef and dairy, New Zealanders have ready access to food which may cause them to gain weight. Other countries that produce more lower-fat foods enjoy the health benefits of doing so. Obesity was not necessarily viewed as an isolated issue, as both the Export Marketing Manager and the Head of Sales and Marketing mentioned the relationship between obesity and inactivity. The Export Marketing Manager explained that sport and physical activity were important to her whole family and that she and her husband "promoted" this activity themselves. (In the same breath, she also mentioned general nutrition to aid brain development and the idea of "healthy mind, healthy body"). The Head of Sales used his own observation and other published research to illustrate the obesity issue:

I see a lot of fat people walking down the streets. Look and, I know it's true because I've read about it. It's probably the single biggest epidemic, food-borne epidemic, in the States, Australia and New Zealand at the moment. It causes a great deal of ill-health in terms of diabetes, heart disease, strokes. A lack of physical activity is bad for you and obese people tend to be inactive. From what I can tell, unhealthy eating to the point where people are obese is the biggest single food-borne health disease that we have. – Head of Sales and Marketing

This response acknowledges the significance of the issue and indicates that high-level managers within EnZed Salmon are acutely aware why it is problematic. The Head of Sales and Marketing also talked about the need to achieve balance and regularly stated that New Zealanders consumer "far too much" of a number of things:

Look, I think there will be a healthy balance of causal micro and macro elements and nutrients and so and so: a good healthy balance of proteins, fats, vitamins, and so on. People will only have as much energy in their diet as they needed for their day. You see a lot of waste in the way people consume today. They eat far too much – far too much that's healthy for them and it's got far too much energy. It has the wrong balance of proteins and carbohydrates and vegetables. We have far too much saturated fat and far too much protein actually in New Zealand diet, far too much wheat and so on. A lot more seafood should be eaten; a better balance between omega-3s and omega-6s comes from eating a bit more seafood. But basically it's a volume thing. If we can just get the balance right so that people actually ate less but

it was far healthier food that would be ideal for ten years' time. - Head of Sales and Marketing

Interestingly, this response specifically mentions consuming salmon for health reasons as well as exercising control in overall consumption.

The issue may also affect the way the organisation can communicate with various publics. The Export Marketing Manager explained that in the United States, where obesity is a bigger problem than in New Zealand or Japan, promoting the health benefits of omega-3 works much better. Americans are generally aware of obesity problems and the company can talk with its customers (who are from the food-service industry) as they would "in house" about omega-3 and its health benefits. Closer to home however, the company's researchers have more work to do to find out if New Zealanders and Australians will purchase a product because it has high levels of omega-3, when a cheaper alternative is available. But this need for research indicates that the issue is more complicated than simply finding the best scientific solution and telling people about the finding. The scientific facts will have little impact on the decisions of consumers who simply cannot afford any omega-3 product.

Solutions to the issue of obesity. The managers who cited obesity as the main food issue facing New Zealand offered a range of solutions that generally involved education driven by either government, industry, individual businesses or a combination of the three. The Export Marketing Manager and the Marketing Manager favoured a more industry-lead approach. The Marketing Manager stated that it was up to manufacturers to create more knowledge and awareness of the benefits different foods have, and to make sure healthy food was reasonably priced so consumers could purchase it. He mentioned the ease and availability of takeaway and processed foods that make it too simple for consumers to choose these over healthier, natural food options; interestingly, this notion links the obesity issue to a second major issue: food processing.

The other three managers who thought obesity was the biggest issue also thought the government should assist with any solution. The Manufacturing Manager did not know straight away where solutions to the issue should come from, but when prompted he said that manufacturers, government and consumers would all have to contribute. The manager of the breeding programme believed

regulation, such as that used to mitigate alcohol and tobacco consumption, could also reduce consumption of fatty foods and the Head of Sales and Marketing stated that education is the main solution to this issue and added that the food industry is well placed to deliver this education but with some parameters imposed by government:

I think in most cases driven by the food industry: people who have a vested interest in maintaining people's health, the public health industry, therefore. I think public education institutions like universities and schools also have a part to play because they have a vested interest in telling the truth and educating people. Perhaps one of the strongest profit-motivated is the food industry so as long as there are limits to what they are able to do, then the food industry is probably the best possible organ for getting that message across. That means that the limits are going to be imposed by law, I suppose. We should discourage unhealthy eating, fat foods, high-sugar content, high-energy foods in favour of less-processed, healthy food that happens to be beneficial for us because we've got such a healthy product. – Head of Sales and Marketing

This quote again shows the way the two issues of obesity and processing tend to be linked together, as "less-processed, healthy food" is given as a better, healthier alternative. Interestingly, legislation such as that mentioned by the Head of Sales and Marketing would also help his company by limiting the ability of competitors with less-healthy products to compete. And he was under no illusions about how this situation could benefit his organisation at the same time "because we've got such a healthy product".

Health issue two: Food processing. Four of the managers believed the most important food-related health issue is the way foods are produced, particularly regarding processing. Interestingly, as salmon is produced and sold with little or no processing, it potentially overcomes a number of the issues presented here.

The National Sales Manager mentioned the prevalence of highly processed foods that often have higher levels of sugar, fat and salt, which also links to the obesity issue and suggested modern retailing may have something to with the problem. He used the layout of supermarkets to illustrate his point, saying that all the fresher food (meat, seafood, fruit and vegetables, eggs, dairy) tends to be at side of the stores. And the middle aisles, which take up considerably more floor space, predominantly shelve processed food like sauces, instant meals, canned foods,

snacks, confectionery and carbonated beverages. He also mentioned that this amount of processed food likely exists because such foods reduce food-preparation times for consumers who are struggling to balance the limited time in their increasingly busy lives; he commented that the fresher and less-processed foods often take extra time to prepare and can be more expensive as preparation can produce slightly more waste as well. The Human Resources Manager took a similar view of the need to get people "back to basics" rather than relying so much on heavily processed foods because these foods can have undesirable health effects on the people who consume them. The manager of the Australian division discussed some specific health reasons to severely restrict the amount of processed food that he and his family consume:

We at home, from a personal perspective, eat pretty much only organic and my daughter was diagnosed with leukaemia just over a year ago now and we changed to an organic diet, although we still have our salmon because it's as close to organic and the way we farm the product...and all the oncologists have told us that we should eat as little processed food as you can. We certainly haven't got the sniffs of haven't had any colds or flus over the last, since my daughter was diagnosed. Our family has been healthy, even our daughter, who is going through chemo treatment, has had next to no long-term stays in hospital, whereas these other kids in the hospital that are regularly in there...you never see us because we look after ourselves. – Manager of Australian Division

The Export Sales Manager made special mention of processed foods that were very high in sugar, arguing that one day people will look back and wonder why they continued to consume such foods. One of the main reasons he offered is that many such foods are "masquerading" as healthy ones, for example, foods that claim to be 99 per cent fat free may well be, but they are usually also high-sugar and low-fibre, which give a short burst of energy but make the consumer hungry again very quickly.

Solutions to the issue of food processing. Those managers who felt that processing was the most important issue had similar views to the other managers about where solutions should come from. Three of the managers spoke predominantly about the food industry leading the way. The Export Sales Manager noted that firms marketing sugary foods will continue to push for increased sales, which over time means that the obesity level will keep rising. The Human

Resources Manager mentioned the importance of food labelling and the need to have high food standards for producers, good education for consumers and better communication between the two. He advocated a joint approach between government and industry, which has already been applied in other areas:

I think industry should be involved. The government, for example, cannot be specialists in all types of food also manufacturers, they have to have industry involvement. I think industry and government, probably. A bit like the way that we have codes of practice for employment that are developed by the industry but are managed by the Department of Labour. – Human Resources Manager

The manager of the Australian division also believed education plays an important part, but unlike the other suggestions, his one specifically included educating manufacturers about the processing they use and the effects this has on public health because there are other ways of producing food. He noted that consumer education is needed too so consumers know what to look for when purchasing food. The National Sales Manager mentioned education briefly but his main suggestion was removing GST from fresh product and fresh food, which would help with "buying choice" as many fresh products are known to be healthy, e.g. fruit and vegetables. He said we already know that we do not eat enough of these types of food.

Consumer education about health. Many managers mentioned education to help consumers understand what they should and should not eat. This idea is consistent with Peerson and Saunders' (2009) call for more health literacy, based on the premise that people who know how to behave and eat healthily can improve their own health. It also shares some congruence with principles of the deficit model of science, not in that it will make people more favourable to science, but in that a lack of knowledge is seen as the major problem. But given that the media is publishing more and more stories about science and health and people are interested in this information (De Semir, 2000), the National Sales Manager may be correct in stating that people already know a lot of important information about healthy food but for some other reason, fail to act on it. This notion would, however, contradict Jayanti and Burns' (as cited in Bhaskaran & Hardley, 2002) finding that education is the key to altering people's eating habits. Credibility is also needed; the National Sales Manager said it was difficult to

present research findings in an unbiased way so the information is delivered believably. He noted the need for someone neutral to spread the findings of omega-3 research. The manager of the breeding programme said the company worked with Massey University to produce posters and recipe cards that contain nutritional analysis information for consumers. Nutritionists from other organisations also assist other public relations activities in addition to on-the-pack information, the website and a continual discussion with the media about omega-3 matters.

The case study organisation's contribution. The discussion about the main food-related health challenges provides a context from which to look at how this organisation could or does actually contribute to public health. The managers were also asked specifically what their own organisation could do to imrove consumer health. Like most of his colleagues, the Export Marketing Manager was enthusiastic when talking about the role the company and the product had to play: "Yes, absolutely. Yes, absolutely. I think it's a key, a key target market both in New Zealand and overseas." She said that in Japan, younger people are far more likely to adopt Western-style diets, and fast food chains like McDonald's are now commonplace. Meanwhile, older Japanese people still follow more traditionally healthy diets with a lot more preparation, using ingredients like seafood. There is concern in Japan about the problems this could create for younger people as they grow up. But she said that EnZed Salmon, as a producer of a healthier food product, had a big part to play offering solutions that help New Zealand and overseas communities to be healthier, especially children growing up.

The manager of the breeding programme pointed to the good education work that the company carries out, along with a "general awareness" of the benefits of foods that are high in omega-3s. This work is needed as Hilliam (as cited in Menrad, 2003) referred to omega-3 as a lesser-known functional ingredient. The manager of the breeding programme said the company does not do a lot to educate people about having foods in moderation even though it was a very important thing to do:

Yes, and portion control should be exercised when eating or consuming our products because of the high calorie content. Yes, it's about 25 to 30 per cent fat. That about puts that in line with a sausage. A sausage with good fat, but at the end

of the day you eat too much you're still going to get fat, which leads to health problems. – Manager of the Breeding Programme

This point about "good" fat is important because fat of any nature has a high energy value and omega-3 is a fat. If someone ate significant amounts of good fat, he or she could still gain weight and become unhealthy if he or she did not use up that energy intake through exercise or other physical activity. Rhetorically, the consistent use of "omega-3" as a term can almost be described as a euphemism because, as the Manager of the Breeding Programme stated, it is a fat and describing it as such would significantly decrease its appeal as a health food to consumers as it connotes a much more negative range of associations. Arguably, using the term "good fat" may help. The term "omega-6" is much less well known and this also helps the company's message because consumption of omega-6 another fat - is linked with increased rates of cancer, osteoporosis, mood disorders, arthritis, heart attacks and obesity. Eden's (2011) finding that consumers prefer simpler rather than detailed information could be good reason to keep to the single-focus message. The generally positive attitude towards the term "omega" without the added complication of explaining differences in the two types of omega may assist the company's ability to persuade consumers of the benefits of eating salmon. Use of the term may also be assisted by public respect for "science-ingeneral" because it sounds scientific but the limited information about both "omega"s prevents it from being "science-in-particular".

Nonetheless, the National Sales Manager opined that the company's education about the benefits of omega-3, particularly linked to salmon, was good for helping improve people's health. Similarly, two of the other managers mentioned that features of the product itself provide a *solution* to both obesity issues and the negative health effects of food processing. The Manufacturing Manager pointed out that salmon is energy dense and "highly nutritious" and people can eat very little of it and feel full so they eat less often and consume fewer calories overall. The Human Resource Manager explained that the product already has very limited processing and chefs in particular find the product easy to use: "You can cut it up and just eat it."

The Marketing Manager noted that the price was "reasonable" and they were making more and more effort to increase purchase frequency by giving recipe advice,

promoting versatility and simplifying preparation. At the same time the product benefits are paramount:

[We] back that up with the benefits that salmon can actually provide for consumers, EGC, omega-3s, selenium, the antioxidants that are in there, the protein content and things like that. We're lucky it's an incredibly healthy product and it does provide loads of benefits and if you look out there for the point of the cost of other proteins, we're very competitively priced against them. The consumers perceive that to be too high. What we want to do is ensure we don't drop it down too far because we still want to actually drive, or foresee it as premium value product. – Marketing Manager

The Manager of the Australian division thought that focusing on the natural rather than the science-based advantages of the product could help consumer health. Childs and Poryzees (1997) also found consumers were looking to consume more natural foods. In the late 1980s, EnZed Salmon was certified organic and the manager thought this certification would give them another message to tell the community, saying the company is genuinely concerned about making a better, natural product for its consumers.

Second Major Theme: Premium Quality

Although the notion of health was more prominent, the idea of salmon being a "premium" product was also well reported when managers were asked to describe the company's products. The managers used the term "premium" some thirty-seven times to describe the company's products. Only two managers (from human resources and manufacturing) did not use the term. This result may be influenced by their role within the organisation as they were not involved with sales and/or marketing. The most frequent users were the Export Marketing (thirteen) and Marketing (seven) Managers. The various managers also used a range of similar terms including superior (nine utterances) and quality (fifteen). None of the managers failed to use at least one of these words regarding the product.

Premium quality: price and image. The company uses a premium pricing strategy and its ability to do so is linked to the first theme of health as the health benefits contribute to EnZed Salmon's premium-price. The Marketing

Manager said they wanted to maintain the price, using a "value leads volume" strategy:

So what we're trying to do is add value to that and consumers to rationalise that higher end purchased primarily through health aspects because salmon contains a very high level of omega-3 so we just push the omega-3, the health benefits, the nutrition benefits then convenience and versatility to actually get the consumer to justify a higher price. – Marketing Manager

However, the health benefits represent one of several strands of the overall "premium" line. A number of managers wanted the product to have a premium or rewarding image. The Export Marketing Manager said the company definitely wanted consumers to view EnZed Salmon as the superior salmon product, and wanted people in foreign markets to demand king salmon from New Zealand. He said the company had done a lot of good work cultivating this image but could be more proactive marketing to overseas buyers. These marketing efforts would involve arming suppliers with more material to promote the brand. The National Sales Manager reiterated the company's premium line, talking about indulgence and reward: "I guess to sum it all up it's definitely in that sort of healthy, good for you, premium reward." Here the ideal of premium is articulated together with the idea of health, which fits with Xu's (2009) statement that consumers often need a reason such as minimising guilt to allow them to "indulge" in a particular product.

The premium line also gives the company another angle when the health messages may not be well received. The Export Sales Manager thought that although the company needed to continue its work educating consumers and spreading the word about the benefits of omega-3, in some contexts it is less appropriate to push the health message. For example, the company has found that Japanese people already know enough about omega-3 and in North American restaurants, chefs and diners are less concerned about health and more concerned about having a guilt-free and enjoyable dining experience so the organisation needs to balance its need to sell the product with the desire to also spread the health message and in a fine-dining context the health message is often left out.

Premium quality: the "EnZed Salmon" experience. The managers were asked to describe what image they wanted consumers to have of their products. Although they each highlighted certain aspects that were most important to them,

they generally gave holistic answers, incorporating a whole experience. The managers talked about a product that was healthy, rewarding, environmentally friendly and premium. And the Head of Sales and Marketing described the overall dining experience and the whole process to get there:

The image is very much around what a *wonderful cuisine delicacy* it is: what an item of *culinary excellence* it really is. So we dedicate ourselves to taste and flavour, the *high quality good service delivery*, imagery around sustainability, good environmental practices of course; the clean-green origin of course, and it's all part of the necessary platform that we stand on. Food safety traceability, vertical integration build good messages so we send out messages around that. The fact that we don't use antibiotics; we farm in such a way that the fish don't need them. We send some good strong messages out around that. – Head of Sales and Marketing (emphasis added)

He also explained that health was far more than just food and people needed to pay attention to their physical and emotional health as well. He said culturally the way we eat is poor; eating should be an enjoyable experience and something that is done with friends and family sitting down and not in a hurry as this detrimentally affects the experience:

Eating food standing up in a rush, rushing out in the mornings or at lunch time or whatever is just, is not good for your mental health. It's not good for your social structure. It doesn't give you an appreciation of what you're eating; you're never actually grateful or appreciative of the food you've been given if you eat it in a rush. Eating the right foods more slowly, in a much better environment, is all part of the food culture that I would like to see in ten years' time – Head of Sales and Marketing

Taking time to eat and enjoy the food is part of the premium experience particularly when compared to fast food or eat-on-the-run type food options. This holistic and cultural approach to health food was something the Head of Sales and Marketing clearly cared about but he jokingly cautioned, "Don't let me go on. I'll get weird."

Premium quality: rarity. King salmon's rarity is the other important product feature and the manager of the breeding programme said the rare image was very important and helped the company position the salmon as a premium product. The Export Sales Manager stated that king salmon is more expensive than

any other variety, partly because it makes up less than half of one per cent of the entire world salmon production:

So it's a very unique and very rare product and highly prized and sought after particularly in the sort of markets we deal with, particularly in North America, and it's known for its high oil content and its delicate texture, but being at the expensive end it really does only therefore limit us to part of the market that we're targeting. – Export Sales Manager

The rarity is also used to distinguish king salmon from competitors' offerings.

The managers most frequently cited Atlantic salmon as the main competition; countries like Norway, Canada and Chile produce significant quantities of this fish. The National Sales Manager reported that Chilean and Norwegian companies produce around 1.5 million tonnes of farmed salmon annually, but this was mostly at the lower end of the market, with some of the better quality farmed salmon coming from Australia, Canada, Ireland and Scotland. The CEO noted the importance of differentiating their product from Atlantic salmon. According to the Export Marketing Manager, king salmon's main advantages over the Atlantic variety are the superior taste and texture, and the fact that it is the significantly rarer species of the two with annual production equal to about one per cent of volume of Atlantic salmon produced:

It's rare. It's unique and it's one of the aspects that we really try and sell and promote to our customers. In Japan, the king salmon species is very well recognised and it's prized for the unique eating. We believe it is a better product, as do our customers. They have done taste tests on Atlantic salmon versus king salmon and they all comment that king salmon is far superior in terms of taste, texture and overall quality. That's mainly because it has a higher oil content. For Japanese being seafood connoisseurs, we kind of trust that they know what they're talking about there. – Export Marketing Manager (emphasis added)

The discussion about rarity moves the product's image away from the science-based notions around health and the benefits of omega-3s, which assists the company in some contexts. The Export Marketing Manager explained that in Japan, people deal with salmon and a significant variety of other seafood far more regularly New Zealand people do, so the Japanese are more "expert" at talking about the product. The company has research and feedback showing that the Japanese diet is healthier

than the New Zealand diet and Japanese people generally already know about omega-3 and health benefits so the company does not need to focus on it. Instead, they emphasise the rarity (one per cent of the salmon population) of the product. Similarly, the Human Resources Manager wanted people to value the uniqueness about the company's product and to see it as something more than just food or fish:

I want stakeholders to see that we have a special product; that it's not lumped in with all other types of salmon, or all other types of seafood. And that I think healthy is a word I would use, but it's more than that because it's about something that we know is good for us but it also gives us other sensory experiences. – Human Resources Manager

Here again, the uniqueness is linked back to the idea of health. The other important background theme related to the premium quality product was taste.

Premium quality: taste. The product's taste is a very important attribute but this too is linked back to health. The Marketing Manager said this about the product's image: "Pure, it's all about taste; our line is pure taste, pure inspiration so really it's a great tasting product and it's really good for you. It's got all the benefits." The company promotes this selling point because it again differentiates king salmon from other varieties of the fish. This differentiation is very important to the company's strategy and fortunately the two varieties of salmon have distinct differences. The Export Sales Manager explained that even a lay person should be able to notice the mouth feel, the texture and the clean taste of king salmon compared to Atlantic salmon. The differing oil content accounts for the variance, with a king salon consisting of between approximately 25 to 35 per cent oil and an Atlantic salmon having between approximately 15 and 25 per cent oil. He said the high oil content means that king salmon tastes "buttery" and is less likely to dry out and become "flaky" even when overcooked, which is easy to do with salmon. He added that New Zealanders can sometimes assume that all salmon has this quality because there are very few other varieties available in decent quantities but the difference is much more obvious in countries with greater choice.

The premium theme that draws from the experience, the rarity and the taste shows that the product is not only promoted or seen from a health/science perspective; however, the health aspects are important enough that they are frequently linked to this second theme. From a rhetorical perspective, the two

approaches use different persuasive appeals to encourage consumption. The health and science messages are a logical appeal (logos) that promote a rational benefit that is supported by research. And the premium messages provide an emotional appeal (pathos) for consumers who wish to be indulgent or reward themselves in some way.

Third Major Theme: Sustainability

The third major theme to emerge from the interview data was sustainability; "sustain" or derivatives thereof were mentioned twenty-seven times. This theme encompasses several lower-level themes, most notably New Zealand and the natural environment. "New Zealand" was the actually the second most frequently used key word (97 utterances) behind "health", and "Marlborough" was mentioned ten times as well but the ideas of environment and New Zealand were intertwined and generally used to explain how the organisation is sustainable, which it cites as one of its key strengths. This third theme too, was generally linked to the other two themes indicating that in the eyes of the company, New Zealand's natural environment contributes to the health benefits and the premium quality of the product:

We talk a lot a lot about the flavour - oh the attributes of the product: so high oil, high omega-3, so the health benefits. We talk about the flavour, the colour, and the texture so you know the eating. That's it. From New Zealand, clean, green. - Manager of the Breeding Programme

Sustainability and New Zealand imagery. New Zealand and its natural environment are highly valued by the managers. No manager failed to use at least one of these terms, indicating that it is an important background theme. Two of the managers also spoke about New Zealand imagery as something they want the company's brand to be associated with. The CEO said that all the company's fish comes from the Marlborough Sounds, so it is very much a New Zealand product that links in with wider movements to promote local business and buy local produce: "In NZ, everyone knows where the Marlborough Sounds is and probably has a positive perception of it so that's something we do use as a salmon grown in the beautiful Marlborough Sounds." The Export Sales Manager said this imagery also has positive benefits for export markets. Even though New Zealand's

isolation adds to some production and distribution costs, the isolation does work in the company's favour because the environment is so well suited to production and marketing purposes. He said there is good imagery "out there" and people perceive the product as safe and trustworthy. The Head of Sales and Marketing spoke of how the harvesting process is also humane, and how the farmers look after the fish throughout the process, which adds to the image of trust. All of these features assist the company as it competes with other companies, although it is more likely to benefit the company competing in New Zealand markets than overseas ones.

Sustainable production. Four of the managers stated that a move to more natural and unprocessed foods could provide health benefits generally to those who consumed such foods. The Manager of the Australian division linked this clearly to a clean, sustainable environment: "Look my thought is that it's more getting back to apple seeds, like getting it back to your base ingredients, ensuring that what you are putting in your mouth has been you know, farmed or grown in the most pristine environment." The Manufacturing Manager used one word, "fresh" to describe an ideal situation that meant minimal additives and preservatives. The Export Sales Manager used the words "pure, honest and integrity" and said that people were really going to "search out" these sorts of attributes in their food in the future. Similarly, the Human Resources Manager talked about the "basics" and choosing food that is unaltered; she also thought that people are already starting to behave in this way.

Consumer demand and knowledge about "sustainable" production presents a future challenge for EnZed Salmon, not because it is unsustainable but because it needs to show that its production methods are environmentally friendly in spite of claims made by other groups. The Export Marketing Manager said the company wanted to show that it produces salmon sustainably because a North American organisation called Monterey Bay Aquarium produces a "Seafood Watch" list of products that consumers should and should not eat based on Monterey's sustainability criteria and all farmed salmon (no specific companies are mentioned) is rated "avoid". She said this issue is most prominent in North America and EnZed Salmon really wanted to get farmed salmon product off that list but it would take some time: "It's a real challenge out there and it's becoming more and more so. The sustainability movement is definitely big and it will be a big challenge for us."

Consumers and chefs do take notice of the list and some people will not purchase the product because of this. The company is doing some television advertising and some social media work in North America to try and put its side of the story across.

The main issue around sustainability is the debate about farmed and wild fish. The manager of the breeding programme explained that the crux of the debate is the amount of energy used per unit (kilogram or pound) of salmon. The manager of the Australian division explained that EnZed Salmon is a smaller operation and it utilises more waste streams, which does not happen in the wild. So in its lifetime a farmed salmon will consume 2kg of feed per 1kg of mass and a wild salmon will consume 6kg to 8kg of feed per 1kg of mass. Because salmon farmers provide the fish with other food such as vegetable or land-based protein feeds, they can reduce the amount of total energy needed to produce the equivalent mass of fish. The Export Sales Manager lamented the fact that the pro-wild message has stronger reach: "That's the message that gets out to people so they only operate with the information that they have been told or have access to."

According to the Export Sales Manager, the debate between pro-wild and profarmed salmon lobbyists overseas is very visible, which is unlike the situation in New Zealand. This debate is not necessarily favourable to the company or to the environment:

Well within seafood itself and particularly salmon (it's not such a big, strong message here in New Zealand), but in North America it's extremely powerful is pro-wild salmon lobby group, anti-farmed, don't eat farmed salmon, eat wild salmon and people buy into that. Not everybody but many, many people do without even giving that a great deal of thought and actually really questioning is that really the most sensible thing to go and do? And there's so many things. It's not just salmon that is caught up in that; there will be so many different foods that we do about the impact on perhaps the environment and sustainability that none of these things are as clear cut or as black and white as what people make out them to be. – Export Sales Manager

Similarly, the Marketing Manager was concerned about misrepresentations of different salmon-farming techniques around the world particularly regarding anti-biotics and growth hormones. Atlantic salmon is farmed in a different way using different technology to king salmon and although the New Zealand public is largely unaware, Atlantic salmon farming is not well-regarded overseas:

So if you Googled anything about salmon farming and you picked up something from Norway or Scotland, Chile and even in Canada, you will see there's a lot of negativity to salmon and that's actually painting a bad picture of what we do here in New Zealand. But we are clean and green with no antibiotics, no growth hormones used in the manufacture of our salmon so we have to sell this story to the world when we're particularly pitching it at a premium level. – Marketing Manager

The Export Sales Manager added that this does not mean that all fish farmers and farming practices are perfect and there are still some operations that need improving, but he believed fish farming was going to be much better regarded in the near future because it was a lot more sustainable than people generally gave it credit for and this would be a major issue for the whole industry to deal with. Interestingly, he also linked this issue back to both the first major theme of health and the second theme of avoiding processing. He spoke about the benefits of natural food but with particular emphasis on food safety. Safe to him meant from a clean environment, free of artificial products, and grown without hormones or antibiotics. These features are again, found in the company's salmon. However, the Export Sales Manager said that anti-salmon farming is not the company's biggest issue: "When it comes to our own challenge, well our biggest challenge that we're actually having now is demand exceeding supply."

Environmental and financial sustainability: Access to water space.

The environment was another background theme and it rated nineteen mentions. Environmental issues present a number of challenges for the organisation to deal with, and potentially place it at odds with regulators and special-interest groups. The single most pressing issue the company faces presently is access to water space for farming. The manager of the breeding programme said the northern Marlborough region had the most desirable space because of the temperature profile, so all the company's efforts focus in and around the Marlborough Sounds. He said the way New Zealand legislation is written prevents the company from having such access to more water space, but the company needs the space meet excess product demand "otherwise someone else will". This is money that could come to New Zealand if the company can move quickly. The Head of Sales and Marketing mentioned that the company does want to have input into aquaculture

law reform in New Zealand and that these laws have been problematic to the company for some time:

Because it's taken so bloody long for realism to enter into the whole argument so it's only now that as a bill before the house that we've been promoting that might permit us to actually expand our water space. We're farming in the commons – in other words, the space that we use is, it's not real estate that we own...we acknowledge that we are a farmer and we have a small amount of environmental impact that we mitigate and take responsibility for...Nonetheless we are having an impact and we're very respectful of what we're doing there. – Head of Sales and Marketing

He added that the most difficult part of the process is convincing the local authorities that the company wants to work with them and mitigating the authorities' fear that some political repercussions may arise particularly from environmental and iwi groups.

The Head of Sales and Marketing explained that this access is very important from a business point of view as well, and threatened to disrupt the run of very good business development EnZed Salmon has enjoyed:

Yes, to get the water space. It's also, and even if we didn't have constraints in the water space, to be able to sustain a moderately high level of growth for a long period of time is a very complex thing to do in the modern business world. Some firms can do it for a while; some firms can do it at a very high level for a short period of time; some firms can float, can slow burn and grow out of the category. There are not a lot of firms that have grown for as long and at the same steady pace as we have for ten years. Managing growth [has] got to be one of the most difficult things to do. – Head of Sales and Marketing

The managers draw from other sources of information and knowledge and relate it to the current crisis. Similarly, the Marketing Manager linked the situation to the company's contribution to the New Zealand export sector: "We're a very small producer but we're a high-value producer from an export point of view. We have targets that we want to increase our volume and that would enable us that we want to move from say from five farms to seven to ten farms." With no further access to water space, the company has very limited ability to expand so it is a very salient issue to the organisation.

Sustainability and buying locally. Three of the managers stated explicitly that it was important to eat more locally produced foods, but these

observations were made with a New Zealand focus that seemed to ignore the possibility that a buy-local movement overseas could affect salmon exports. The Marketing Manager said more people were growing more of their own food and getting it as fresh as possible to share with family and friends and cooking more at home. She said this would help keep food more natural. The Export Marketing Manager pointed to the food malls in the United Kingdom where people could purchase locally produced food, which hopefully will catch on more here: "I think in New Zealand people will want to support locally, and buy locally which I think is a great thing, so I'm hoping that fruit and veges and the likes of salmon will become more popular." The Export Sales Manager pointed to the growth of farmers' markets as a positive sign:

You hear quite a bit of this go-local sort of movement and we see that in New Zealand here with the rising success of our farmers-type markets where it's a locally made produce and a healthy clean environment. People want to know where their food comes from; they like to deal with the almost down to the producer and I think we're going see more of a movement towards that and mass-produced food is still going to be there but it's going to have to [be] done along the lines that still fit with the ideals of that smaller care and attention that you'd expect to see from your local farmer. – Export Sales Manager

The close locality of production is articulated here with cleanliness, a lack of processing, and familiarity with or trust of the producer. This issue of trust is interesting because Bhaskaran and Hardley (2002) found that consumers did not display a great amount of trust towards food companies as sources of information about functional foods; however, in this case members of a food producing company are displaying a similar lack of trust and a preference for smaller local producers. This could mean that they associate their own company as sufficiently local to be trustworthy, or that their company is still small enough to be reliable. The preference for natural food was important to several other managers as well. The managers mentioned one other challenge for the organisation that related to New Zealand, and that was its location at the bottom of the world.

Business sustainability: Geographic isolation. New Zealand's geographic isolation also presents some challenges to the company. The Head of Sales and Marketing explained that getting the right technology to New Zealand can be difficult as much of it is developed in Europe or the United States. Although he

noted that New Zealanders were "pretty good" at developing new technologies themselves too, he also said overseas competitors often gain quicker access to the latest developments because they are so much closer. If the company wants to develop something new, it cannot simply approach someone locally; it may need to send parts to places as far away as Norway, "so geographic isolation from where the technology exists really slows down the NPD process for us." He said New Zealand's location also makes recruiting the right people more difficult than it would be for overseas competitors. Sometimes the company is forced to recruit in countries like the UK because the there are no people with the right expertise already in New Zealand. The manager of the breeding programme also lamented the lack of aquaculture experts globally, which means the company has to search far and wide for good people. So generally, EnZed Salmon's NPD is slower than it would be if New Zealand was closer to other markets:

Being isolated from our export or international markets brings its challenges too.

There are trade access barriers, freighting difficulties, and transportation and packaging challenges and so on, but you're also a long way removed from the consumer so it's very hard to get the voice of consumers and voice of customers from such a great distance. That means you're constantly sending samples to international markets for the response that you're looking for and it adds days and weeks for the whole process, timeline again. It's difficult that one. – Head of Sales and Marketing The geographic isolation appears to also enhance the managers' connections with wider New Zealand images because it links with a "kiwi battler" mentality of the smaller competitor working hard against larger opposition, hence the recognition that New Zealanders were pretty good at developing technology. This New Zealand-centred ideal together with the other themes and background themes reveal aspects

These three themes are the strongest indicators of the way that organisational members make sense of their own organisation in the wider social, political and economic context particularly regarding health issues, which is the focus of research question one. The managers agree on the health benefits of the product and the potential benefits that consumers can gain from eating it. And while they see that their own organisation and the food industry can contribute to public health outcomes, they also see a role for government and other agents,

of the organisation's identity and image that will be discussed next.

including consumers themselves, to play to address key health issues like obesity and food processing. They also see the organisation as a premium producer that focuses on being superior to its competitors and that can make serious contributions to the New Zealand economy in an environmentally sustainable way. Using the three themes consistently through a range of communicative exchanges is an example of what Maitlis (2005) calls "sensegiving", in which organisational members can deliberately use messages to influence sensemaking processes. The following section expands on these ideas further with specific reference to sensemaking and the construction of identity and image.

Enactment of the Three Major Themes: Identity and Image

The three major themes and various background themes tell a story about EnZed Salmon's identity and image, which is particularly pertinent to research question one. Major issues such as obesity, food processing, farming methods, and water access regulation potentially create what Lamertz et al. (2003) refer to as identity threats and these threats can activate the sensemaking process amongst internal stakeholders (Weick et al., 2005). These stakeholders will likely define the issues in ways that help them understand the issue and preserve their status (Lamertz et al., 2003). Their status will still be grounded in pre-existing notions of identity informed by the organisation's corporate communication, branding strategies, and taken-for-granted beliefs that form part of the day-to-day operations at EnZed Salmon. The way that the organisation manages these issues is the focus of research question two, which looks at how the organisation uses corporate communication to address contextual issues it encounters. All of these factors and by extension all of the themes contribute in some way to the overall organisational identity. As Hatch and Schultz (1997) stated, the boundary between the internal and external functions of the company is breaking down so internal stakeholders have more and more access to the views of outsiders, which can influence sensemaking and identity. The way that the managers make sense of their organisation's actions and response to issues from outside constitute the organisation's identity and the closely linked notion of image (Gioia, Schultz and Corley, 2000). Not all the managers share identical views on every issue, but as

Hatch and Schultz's (1999) jazz metaphor suggests, organisational members may play different instruments but they all contribute to the same song.

Organisational identity. The identity of the organisation includes those things that are culturally embedded (Hatch & Schultz, 1997) or those things that answer the question "Who are we as an organization" (Brown, Dacin, Pratt & Whetten, 2006). This analysis of identity is therefore based on the interview findings.

Organisational identity and the theme of health. The managers of EnZed Salmon most consistently referred to ideas about health when talking about their organisation and its products. And three of the managers stated that EnZed Salmon's current public relations, marketing and education work was already making a significant contribution to public health. The Head of Sales and Marketing was particularly convinced of this:

We lead the world in this, I think in our PR effort, pointing out to consumers what the health benefits of our own products are, what do we mean by health benefits, how to lead a healthy life. So we use magazines such as *Healthy Food Guide* and every other consumer and trade magazine that has health or food section we try to get that healthy food message across. – Head of Sales and Marketing

The fact that food and eating were commonly linked to health reveals that health issues were important to the managers. They also all claimed to eat salmon at home with their families. Weber (as cited in Christensen & Askegaard, 1999) argued that people's outlooks of organisations were real insofar as they produced pragmatic effects and arguably this shows that the managers do believe in the health benefits of the product. They are also likely to gain feedback from their families about the taste and other physical aspects of the product.

The Export Marketing Manager also expressed faith in the work her own company does to help people eat more healthily:

I guess it would be nice if producers such as ourselves were being socially responsible and offering attractive solutions for families to give their children such convenient meal options that are easy to prepare, quick and are actually liked so you don't actually have to try and force it down their throats so I think a lot of companies are doing this, the likes of McDonalds you see now, they are offering alternatives to the Happy Meals and whether children take that option I'm not sure but at least they are offering other options and I think it's up to producers in New Zealand and

worldwide to be offering attractive solutions for families like that. - Export Marketing Manager

Here again the health options are linked to the idea of choice that producers are supposed to provide and in this case the manager identifies the organisation as "socially responsible", acknowledging the onus of the company and other food producers to provide a product that benefits for consumer health. However, a tension between availability and actual consumption/benefit arises as the consumer ultimately needs to decide to exercise that option. So the Export Marketing Manager also emphasises the need for convenience, which potentially removes another potential barrier to consuming healthy food.

The Human Resources Manager used the term "segregation" to describe the effect food choice could have on society, saying that the "simplistic" food that is probably the healthiest will continue to get more expensive meaning that some people could afford to be healthy and others would need to go with a cheaper option "and that's going to have wide-ranging implications on health."

Interestingly, this point about price shows another tension in the organisational identity where the company's premium products reach a threshold where its health benefits can be redundant due to lack of affordability to those who could benefit from it the most, but some of the managers recognised this tension.

Three of the managers expressed unease about the access people in lower socio-economic groups had to healthy food options. The Export Marketing Manager stated that price is a significant barrier for many people and supermarket shopping has become very expensive, especially fruit and vegetables, and to get children and the general population to eat more healthy food, it needed to be affordable for the whole community. The Export Sales Manager also noted the greater health food choice that people in the medium-higher socio-economic groups enjoy and the fact that these groups have tended to respond to the healthy food messages more readily. Meanwhile, people at the other end of the scale were suffering due to poor choice:

If you're talking in the lower end it can be just purely about cost and price and mass produced, even that message may get stronger you know. We're going to have to. We've seen it in our health system, rising pressure onto our health system through

sickness and illness really is the ambulance at the bottom of the cliff. – Export Sales Manager

Interestingly, the Marketing Manager noted that health issues are not unique to people of lower socio-economic status: "But there's just as many fat higher socio-demographic people as there are in the lower demographics, purely, it's choice, so they're eating the wrong things when they're out, although they can afford it." This point about "choice" reiterates the quite strict limitations on what the company can actually do to improve people's health owing to consumer choice and ability to take advantage of the benefits of omega-3. Turney (1996) explained that people use scientific information for their own purposes, so if consumers do not feel their health is under threat, then messages about omega-3 may have little persuasive impact on them. This is perhaps why some of the managers stated that government needed to help any solutions to major health issues because it has more power and resources at its disposal.

However, the Head of Sales and Marketing did state that the food industry was well placed to deliver the right educational messages about healthy food to consumers. Equally though, one could argue that producers of unhealthy foods are equally well placed to promote their products, which brings it back to consumer choice and health literacy again. The focus of consumer choice indicates that internal stakeholders see the organisation as provider of an option to people and fulfils a "socially responsible" role by having a healthy product and promoting the benefits of it.

There is evidence that this enthusiasm for the product is widespread in the company. The staff's passion and enthusiasm for the product were also mentioned by two of the respondents. The Head of Sales and Marketing said these attributes were important for customers to know and actually provided an advantage when the company tries to sell the salmon: "The fact that we care about our product, are passionate about it, which is the truth actually, and it's what the chefs want to hear. If we care they'll care." Reportedly also, visitors to the organisation also notice the company culture, which is relevant as Brown, Dacin, Pratt and Whetten (2006) state that what internal stakeholders believe outsiders think of the organisation affects the way the internal stakeholders themselves view it. When asked if the organisational culture was promoted for recruitment purposes, the Human

Resources Manager explained that visitors to the organisation do notice something about it, which seems to stem from the belief in the product and the health benefits it provides:

Certainly the feedback I get from anyone who comes and visits the organisation is about how incredibly passionate our people are about the product and yes, and that people have commented to me that they haven't seen this in other organisations. So yes, I think we have that really special level that we were aiming for. – Human Resources Manager

Hatch and Schultz (2007) state that feedback from outsiders likely provides feedback that forms identity and image, so this passion for the business could well be re-affirmed by visitors. The product features seem also to be a source of pride for the staff and help them make sense of the organisation as a responsible company.

When describing the health benefits of the products, the managers routinely made reference to the two other major themes of premium quality, New Zealand, and environmental/natural imagery. In a sense, to EnZed Salmon members, the salmon product exists in a middle ground within the science/processing/unnatural and natural/unprocessed/raw dichotomy that Eden (2011) discovered in her article about functional and natural food claims. As the product is essentially natural, it can claim many of the benefits of organic or unprocessed food and at the same time, the use of scientific research and communication about functional benefits gives it credibility derived from perceptions about science. This means that the organisation is potentially drawing on two opposing perspectives to inform its identity. If consumers are confused about scientific messages, as Rowe (2000) states, then using other messages would help the organisation. In this case they have arguably the best of both worlds, which is possibly a key driver for the way the members make sense of their organisation. However, issues such as controversy around farming methods and access to water space test the organisation's identity and cause its members to look for other ways to make sense of its work.

Identity threats and the theme of sustainability. As mentioned in Chapter Two, the company claims sustainability as one of its key business advantages, and this is reflected in the existence of the third major theme. Externally argued challenges to the company's environmental sustainability, such as Monterey Bay Aquarium's seafood watch list that encourages consumers to avoid

farmed fish products, represents a tension between two opposing views on the specific issue. This situation presents a potential identity threat to the organisation, and as Lamertz (2003) states, this threat triggers members to define the issue in way that is normally consistent with the organisation's existing identity. In this case, the managers at EnZed Salmon are confident that their argument about energy input and output means the organisation is still sustainable:

There are some quite outspoken people there that are very active in terms of promoting sustainable salmon and a lot of it is; we can argue a lot of points that they make. They talk about wild salmon being a more sustainable option but they don't think about that wild salmon eat a lot more of the food chain below them and they eat a lot more to produce the finished salmon weight, if you like, [than] what we put in our salmon feed to produce the farm salmon. So, there are a lot of things that don't really add up with their arguments but it's finding the right way of educating people of the correct story. – Export Marketing Manager

Rhetorically speaking, the organisation presents a logical argument that challenges the actual facts involved rather than attempting to justify the practice of fish farming because of the other benefits the product gives. In this instance the solution to the problem is "educating people", or explaining EnZed Salmon's position on the argument. This challenge is something that is far more likely to need to be dealt with in US markets as the managers mentioned that this is where the issue is the most controversial and has the most public attention.

While this remains a virtual non-issue in New Zealand, the company's ability to access water space in the Marlborough Sounds to increase production definitely is an issue. The issue presents another identity threat to the organisation's environmental and financial sustainability. Opponents to the expansion are concerned about the environmental impact and the company sees this issue as a serious threat to the sustained business growth it has enjoyed for the last decade. The Head of Sales and Marketing acknowledged that the farming inevitably has some environmental impact but was confident that the company mitigates the environmental impact of the fish farms by cleansing the farm water out so that organic material cannot build up to a point where parasites become a problem, much like flushing the toilet. Again, this shows that the company believes its environmental practices are sound and is able to continue identifying as an environmentally sustainable organisation. The other interesting feature of this

issue is the way the organisation can contextualise it relative to other issues in New Zealand.

The organisation's business identity. The company CEO makes sense of this issue as part of a much bigger picture, particularly related to economics and the contribution businesses make to society. He said New Zealand aspired to have a first-world living standard like that of Australia and other Western nations, but the reality was that economically New Zealand was a long way behind these countries and needed to develop profitable and productive export industries. In this case, he identifies EnZed Salmon as a successful exporter. He added that New Zealand's balance of payments suffers from lack of exporting and that the potential contribution his company can make to the New Zealand economy is very important to the debate around access:

In relation to agriculture, aquaculture, it's really deciding what do we want to be famous for? ... So you know there's some challenges around what is a pragmatic and sensible level of development. What do we want as a standard of living as a country. You know it extends beyond food into things like do you want to mine conservation lands or not. And often these things I think get hijacked by emotions: are you for or against? – CEO

This answer suggests that he believes there are other more practical issues at hand that people may not think to consider in particular debates. For example, all of the health benefits of the product are wasted if they cannot supply all those who wish to purchase it. The idea of a "standard of living" includes connotations of health and wellbeing, which links back to the first major theme. The CEO also repositions the debate in terms of benefits to New Zealand, arguing that the country undermines its own economic prosperity by making it harder for the company to grow. Rhetorically speaking, he is prioritising rational (logos) appeals that are "pragmatic and sensible" over emotional (pathos) appeals that can "hijack" the debate. Such an approach is consistent with public respect for science-in-general and the need to use facts, figures and models to arrive at conclusions.

Overall organisational identity. Generally, the organisation identifies itself as a smaller player in the market that is working hard to provide a good healthy product and educate people about it. It sees its role as a provider of a healthy option and is focused on being the best at that particular option rather than

a solution to too many problems, and it is very passionate about this product. As a small organisation relative to many other private companies and public sector institutions that focus on health, there are limitations to what EnZed Salmon can do. Internal stakeholders appear to be aware of this but still take pride in product benefits. At the same time, major issues such as health and the environment activate a sensemaking process in the organisation that ultimately galvanises the organisational identity based on a strong belief that they are onto a good thing. The organisational identity is resilient to threats from sustainability issues based on the belief the challenges are based on inaccurate facts and the company still provides other important benefits such as earning New Zealand money by exporting. Hatch's (1999) jazz metaphor helps to conceptualise the image overall. While the managers prioritised different aspects from amongst the three themes in their responses, they generally understand the tune and together they combine to create one "song" and the various contextual issues represent the "audience reaction" that also contributes to the way the "musicians" play. The three themes exist continuously and interdependently as part of the overall identity as illustrated by this quote about dining that seamlessly mentions all three themes:

It's an indulgent meal and they don't want to be going out and feeling guilty so we sort of fall into a different set on that. They don't really want to be feeling guilty about hungering rainforests or rivers or oceans for going out and eating either, so different sets of drivers and different market channels, but for us to continue on that in terms of marketing and keep that message out there, you need something that is really healthy, that is, it is grown in a safe and sustainable way and I think it's good to continue on with that message. – Export Sales Manager

The following section will look at the organisational image and analyse the relationship shared with the organisational identity to address research question three, which explores the consistencies and contradictions that exist between the case study organisation's organisational position and the key themes and messages in its corporate communication.

Organisational image. Organisation image is an overall and distinct impression that an individual or group has about the organisation, which results from the individual or group's own sensemaking and the communicative practices of the organisation (Alvesson as cited in Hatch & Schultz, 2007). EnZed Salmon

issues press releases about important company news regarding products, issues, and promotional activities. Consistent with De Semir's (2000) finding that organisations increasingly use public relations to create science-based news to satisfy growing public interest, it also releases information about new scientific research findings. At the same time, the company engages in a number of marketing activities as part of its overall corporate communication strategy, which some academics term integrated marketing communications (IMC): the combined use of advertising, public relations and marketing to achieve strategic organisational goals (Hutton, 1996). Hunter (as cited in Grunig & Grunig, 1998) found that marketing tends to be more dominant in companies that produce consumer products as the consumer stakeholder is the most important; however, EnZed Salmon's Head of Sales and Marketing highlighted the increasing importance of public relations to the company's corporate communication strategy, describing it as "the most powerful consumer approach that we've taken". Duncan and Moriarty (1998) argue that relationships with stakeholders are influenced by all the organisation's marketing and public relations activities, irrespective of which function the organisation considers it to be from. These "marketing" and "public relations" activities are all opportunities for the company to build and maintain a public image so they are both considered here in this analysis of the organisation's image.

Because the analysis uses only internally produced data the findings more likely reflect the organisation's "intended image" (Brown et al., 2006), which is the impression the organisation would like its stakeholders to hold. Because this intention is driven by managers, some information obtained from the interview research is also included here.

Images of health. Consistent with the importance of health to the organisational identity, health is a major feature of the organisational image. Companies communicate specific images or messages to distinguish themselves from other organisations (Nandan, 2004), creating a unique image. Three of the nine press releases from the sample timeframe mentioned the health benefits of the salmon products, and in two of these releases the messages were related directly to consumer health with reference to omega-3 health benefits. In both cases the news lead related to a new product offering but the health benefits were pushed strongly with six mentions of "health" and four of "omega-3" in one, and seven mentions of

"health" and six of "omega-3" in the other. The messages tend to match Dodds, Tseëlon, and Weitkamp's (2008) finding that consumers prefer simpler messages rather than complicated scientific descriptions. For example, one release explained that king salmon "is high in Omega 3 fatty acids which are the healthy oils that are vital for life and good health and can help to maintain a healthy heart." This message assumes a low to moderate level of health literacy where a consumer should have little trouble understanding that omega-3 improves heart health. Greenberg and Graham (2000) cite psychology research that finds consumers like to take shortcuts when they are unfamiliar with scientific terms, so the simplified message in this release may help consumers understand the message. The same release goes on to quote the New Zealand recommended daily intake of omega-3 from an unnamed source; the intake is 430mg for women and 610mg for men, which the release states can be found in 15g or one slice of the company's salmon. This message uses slightly more sophisticated scientific language but simplifies the message down to saying, "eat one slice of salmon every day", a message that again may assist consumers' decisions about health. Wilson (2003) has found messages focusing on correct behaviour are a useful way to get people to achieve good health outcomes when they may not understand the scientific reasoning behind health complications. If consumers accept the scientific information about omega-3 and act upon it, then EnZed Salmon can enhance its organisational image associated with health. A company can reinforce its image by making sure that the identityimage link is strong (Nandan, 2000).

The CEO explained that all health or scientific messages that position the product depend very much on what the company feels the target audience already knows and understands, which is an albeit minor consideration of health literacy. However, Wilson (2003) states that the population generally has very poor health literacy, especially elderly and non-native language speakers; the average American reads at an eight-grade level and most medical information is written to twelfth-grade audiences. But EnZed Salmon seems to be simplifying its messages down adequately. The CEO gave an example, saying that king salmon has twice the amount of omega-3 as Atlantic salmon, which is a message they would consider most of the public to understand. It is not a full scientific explanation but it is enough for people to think "oh ok, that's good". If presenting information that

people were less likely to understand, the messages would be explained differently. The Head of Sales and Marketing stated that targeting a higher socio-demographic market means that detailed explanations are not often necessary. This statement assumes that health literacy is positively correlated with general education, which is also positively correlated with wealth:

We don't go very far because the segment of population, the consumer segment that we're after, we assume is relatively literate. That's a big assumption but I think it's probably a pretty good one for us. It wouldn't be if we were in the middle of the market. But having said that, whenever we are communicating with consumers and the public, we do try to keep things as simple as possible. We use diagrams and graphics as much as possible. We don't use technical jargon as much as we can. Just some basic housekeeping stuff you might expect good communications to be about but I got to say, our assumption is that we're dealing with a relatively literate audience. – Head of Sales and Marketing

The Marketing Manager confirmed this position saying they generally expect that the target demographic is aware of what a lot of the scientific information means. Miller (2001) argues that communicators need to be more aware of their audience's knowledge when communicating scientific information, so the company may benefit from finding out more. However, EnZed Salmon is careful to reference scientific claims to experts, for example: "Health experts agree it's important to have salmon on your weekly shopping list to ensure the family gets fresh, healthy fish on a regular basis." In a second release the reference is more specific: "The Omega 3 Centre reports it helps in brain development with improved growth, development, increased attention, and improved learning and behaviour patterns all noticed." This approach allows the company's claims to appear more credible by using the expertise of others in support. It may also make the company appear more trustworthy as it uses science-based claims rather than purely promotional ones. Arguably, this is made possible by the general public's faith in science and scientific research and it also uses major health issues as a platform to promote the product.

Linking the product to health issues may create a more favourable image for the organisation. Reichart (2003) states that stakeholders will often judge the moral worthiness of corporate activities; therefore, if consumers agree that health issues are salient, promoting the health contribution of the product can improve the organisation's image. If people in the target markets were already healthy, then this idea may not feature so prominently in the organisational image as it would have less value. This might explain why the message is not as strong in Japan, a country with lower rates of obesity than the other main markets of the US, Australia and New Zealand.

The company website also reports on the company's contribution to health and health-related activities. It states that EnZed Salmon also sponsored a reasonably well-known running event a few years ago and created a campaign where a New Zealand celebrity trained and competed in the event with the company's support. The focus was about a complete healthy lifestyle that included eating salmon and other food, but also exercising and maintaining a healthy weight. Reportedly, the high protein content of the salmon helps athletes recover more quickly and provides the right type of fat to provide the body with the essential nutrients it needs but to not store it as readily.

The company has also assisted Brain Awareness Week recently as a foundation member of the Omega-3 Research Centre, which runs the event. This was an opportunity to link the benefits of omega-3 with brain health. They published a story about recent research by the Neurological Foundation of New Zealand which found that approximately 20 per cent of all New Zealanders will experience some kind of brain ailment during his/her lifetime. They also cited overseas research that found consuming omega-3 (fish) oil reduces the risk of dementia and Alzheimer's disease and in already healthy brains, omega-3 can improve overall cognitive function. This research is then linked with the product itself by stating the amount of omega-3 found in salmon and how easy it is for people to increase their daily intake of it. The work the company has done with the Omega-3 Research Centre and the Neurological Foundation enables EnZed Salmon to continue to find out and publish information about omega-3. In this case, the salmon is most definitely positioned as a functional food with scientifically supported health claims that are used to promote the product to consumers.

These foci on health issues, particularly the benefits of omega-3 all re-affirm the health message that came through as the first major theme and a key component of the organisational identity. The continual repetition of these ideas can also be re-absorbed into the organisation as part of the identity. As Schultz and

Ervolder (1998) state, constructing desired future images is a useful way of forming or changing identity.

Images of convenience and "premium" positioning. One background theme appears more prominently throughout EnZed Salmon's corporate communication messages, relative to the themes that constitute its identity, and that is the preparation and convenience of the products. This could result because the interview questions were deliberately more focused on health or because the convenience factor is actually a better promotional message for marketing the product. The company publishes a range of cooking and preparation ideas in cards and recipe books, and online. Many are available at retail outlets at no charge and the main focus of packaged products and point-of-sale information is about preparation and taste, which is supported by the recipes. The recipes basically illustrate how the products can be used at breakfast, brunch, lunch and dinner, for special occasions when people have more time to prepare, and for quick meals when people have little or no time to prepare food. The recipes show the degree of difficulty to prepare so that in theory, anyone can find something that he/she is capable of making; ease of preparation was a key factor many managers spoke about, especially as a reason why people may avoid preparing healthier options. There are also recipes that are presented as being healthier options. The company also provides suggestions like wine matches that complete the dining experience, which is consistent with the image some of the managers mentioned. They provide information on how much salmon per person is needed when purchasing, which would hopefully avoid over-consumption and information that shows how to store the product so that it stays fresh. Generally, the salmon recipes do not include processed foods as ingredients and feature a noticeable amount of vegetable or salad items, which is again consistent with the managers' stated preferences for unprocessed and natural foods. There is little or no mention of organics.

The company regularly produces media releases and displays them on the company website at a rate of between five and fifteen releases each year. Two of the media releases from the selected time period lead with news about new products that were now more convenient and fresh. The term "easy" was used three times in each and one also used the term "convenient" twice. However, in both of these releases the messages about health followed and received more space. Arguably, the

order of points show that the convenience was more newsworthy but the space reveals that the health benefits are still the most important feature of the product.

Many of these releases include information about winning taste awards at international events, which is something the company seems to achieve very regularly. Such awards are important to maintain the organisation's premium image. "Images" are primarily held by outsiders to the organisation (Hatch & Schultz, 2007) and these awards confirm the image and at the same time reinforce the identity for internal stakeholders. Most recently it was recognised at the International Taste & Quality Institute (iTQi) Superior Taste Awards. The stories are presented with a distinct New Zealand angle on the story and detail how and why the salmon products won each award. Such awards help the fine-dining and premium images that managers stated was important, and probably assist their efforts to get brand names onto menus at white-table-cloth restaurants. The stories mention the versatility and the ease with which the salmon can be used and they promote the taste and flavour that is unique to this product.

Images of environmental sustainability. The company prides itself on its controlled, sustainable, production process, which ensures the quality of the salmon. Some aspects of the production process present potential issues that would threaten the organisation's environmentally friendly image. Blumer (as cited in Lamertz et al., 2003) states that issues only exist when socially constructed as such and these constructions are contestable. The organisation makes several attempts to communicate with stakeholders to maintain its preferred image. The website explains that the production process begins in the company's two South Island hatcheries where the salmon eggs are taken and fertilised under a strict family selection programme. At the same time as the fish would normally migrate to the ocean, they are moved to one of the five salmon farms located in the Marlborough Sounds. The company points out that there are no chemicals, waxes or pollutants used because the water is kept pure and at an ideal temperature. EnZed Salmon imports feed from around the world and the company ensures that the feed has the right balance of proteins, vitamins and other essential nutrients to breed healthy fish, creating minimal waste and improving growth rates. The site also stresses that the salmon are not genetically modified, do not receive growth hormone and have no diseases, meaning the process uses no antibiotics or vaccines. The humane

method of harvesting is also mentioned; this involves using an anaesthetic developed in New Zealand because the fish do not like being handled and this practice has been endorsed by the British Humane Slaughter Association. The continuous supply means that fish can arrive at any international destination within 48 hours of leaving the sea, and preservatives are not necessary. This information about purity and natural production shows the product has many similarities to organic food, which assists the organisational image as Childs and Poryzees' (1997) found that consumers prefer natural products. Eden (2011) found that consumers tend to see functional and organic foods as opposites, so the image EnZed Salmon creates for its product here can be seen as a paradox, but one that seems to be working for the organisation. The company's environmental credentials are also discussed. The company points out that it aims for renewable and sustainable management of its stocks and compares the farming method to that of traditional fishing methods. The issue of farmed fish is at a stage that Lamertz et al. (2003) would describe as "subliminal awareness", meaning that a limited number of stakeholders are aware of and actively engaged in the debate but it has not received major attention. Here the organisation's tactic is to challenge the facts and hopefully prevent the issue from receiving greater public exposure. The company explains that traditional fishing threatens to deplete fish populations of the targeted species and others that share the same space, whereas farming allows the company to maintain the population and avoid upsetting other fish species. The company states that its environmental standards go further than that required by law and they monitor water quality continually to ensure that waste from the farms is minimised. The environmental impacts are monitored by the Cawthron Institute: a FRST-funded, independent aquaculture research organisation that monitors coastal and fresh water quality throughout New Zealand. The high water quality is actually in the company's best interests because salmon do not grow or survive well in polluted, low-nutrient waters with inconsistent temperatures. The company also explains that it works with the Ministry of Agriculture and Forestry to test for diseases and other pathogens that may infect the fish but none have ever been found. The main issue that could threaten the environment comes from organic feed and fish faeces building up below the cages. This waste is dispersed to deep water to maintain the overall water quality and reduce the risk of disease.

This environmentally friendly image is consistent with the information given in the interview data. As this issue receives some media attention and is particularly relevant to the organisation, it is likely that the external messages are fed back into the organisation's sensemaking process. So as internal stakeholders read and hear about the company's sustainable practices, this information is re-absorbed into its identity as well.

The company has also recently issued a media release explaining its position on gaining increased access to water space in the Marlborough Sounds, and its application for the access is currently being heard. This press release is an example of an "information subsidy", which as Carroll and McCombs (2003) state makes it easier for the media to publish the organisation's point of view. The release states that the process is dealt with by the New Zealand Environmental Protection Authority and if successful would allow the company to double its production within half a decade and significantly increase sales value. Using an economic rather than an environmental argument can be seen as an attempt to shift the focus of the agenda, and controlling the agenda helps to control the argument (Carroll & McCombs, 2003). The company mentions that the application could be declared one of national significance by the Minister of Conservation. If so, the process may then be administered by a special board or the Environment Court. In the interviews, the CEO did mention that this process was the biggest food-related health challenge he could think of, and it would require people to look at it from a much broader perspective that incorporates a re-think of how New Zealand needs to develop economically to reach the living standard New Zealanders aspire to. Reichart (2003) states that managers (and other stakeholders) can perceive "expectational gaps" where the current state of matters in not "what it ought to be" and then act on the issue. In this instance, the CEO has seen a gap between the way EnZed Salmon's financial contribution is recognised and how he would expect it to be recognised and is therefore attempting to close that gap. In the press release, the company outlines its financial performance over the past and argues that this can continue if it is permitted to access the extra water space in the Marlborough Sounds. They also outline the company's sustainability and environmental credentials and the work that is already being done to reduce environmental impacts.

Conclusion. The three major themes that inform EnZed Salmon's identity and image are health and wellbeing, premium product, and New Zealand and the environment. The health theme features most prominently through notions of organisational identity and image, illustrating the reciprocal nature of the two concepts and the importance of health to the organisation and its product. The company believes in the health properties of its product and has no issues presenting this information to external stakeholders so they can choose to buy the product if they accept the scientific information and the price. At the same time, various other contextual issues require managers to consider other aspects so the identity is multi-faceted, incorporating notions of quality, economic prosperity and sustainability as well, which are fed into the intended image. These issues force the organisation to contribute to debates around environmental issues at the same time as it tries to maintain its premium image and promote the health benefits of the product. The company argues that its business success should be allowed to continue to contribute to New Zealand and uses this position in environmental debates. The organisation is continually re-stating all of these key themes through its corporate communication activities, which contributes to a consistent image. But internal stakeholders see these images also. Sensemaking is a retrospective process of understanding the organisation (Weick et al., 2005) and when the internal stakeholders' "senses" are consistent and the image does not contradict the organisational identity, the process protects the organisational structure and maintains identity (Lamertz et al., 2003). Overall, the identity and image are largely consistent with each other; Hatch and Schultz (1997) state that organisational images are frequently saturated with markers of organisational identity because they come from the same culture. Interestingly, the identity and image of EnZed Salmon is drawn from a somewhat unique combination of science-based and natural imagery that provides the organisation with flexibility to tailor its corporate communication to suit specific audiences and contexts. The construction of image is driven by both marketing/sales concerns and the need to respond to issues from the operating context.

Chapter SIX - Conclusion

This study concludes by outlining the major findings, the implications and contributions the study has made and possible areas of future research.

Major Findings

The study illustrates the complex inter-relationship between organisational identity and image, and the significant impact that contextual issues have on the sensemaking processes that internal stakeholders engage in while continually reconstituting their organisational identity.

The main themes of health, premium quality and sustainability inform both the identity and the intended image of EnZed Salmon in a circular process where each reinforces the other. Organisational members often articulated the themes together, perhaps unknowingly, which indicates that the themes work synergistically to form the overall identity and image. The notions of health are derived directly from scientific confirmation of the health benefits of omega-3, which occurs naturally in the product. The company goes to significant lengths to make sure it has credible research that consumers can understand, and works to simplify scientific information so that consumers who may have low health literacy can still understand them. The health benefits of the product provide internal stakeholders with motivation to believe that the company is socially responsible and makes a contribution to consumer health even though the product is targeted at a higher socio-demographic. The premium quality, rarity and superior taste of the product are also sources of pride for the organisation so this tension may never be reconciled, although many of the managers pointed out that government and other agencies should also address such public health issues. At the same time, the organisation works to maintain sustainable production processes and protect the environment of the Marlborough Sounds. The clean, green New Zealand image contributes to both the ideas of health and premium quality. It means the product is pure, clean and natural, and that it can command a higher price.

While the three themes inform the organisational identity and image together, individual themes appear more important in different contexts and are

driven by different motivations. The health benefits of the product do make it unique and give the organisation some strong logical arguments for consumers to buy the product. The benefits also allow the organisation to, like all other functional food producers, link its product to the wider issue of health and take advantage of consumers' poor health and their willingness to address it for various reasons. Salmon differs from many other functional foods in that the functional benefit comes from the natural product, whereas many other functional products have health benefits added or created in a laboratory; e.g. calcium-fortified juice. This naturalness allows the company to present an image that draws on two often polarised discourses: modern science on the one hand, and natural or even organic images on the other. The natural imagery is also a link to sustainable production but this is where the organisation meets tensions and threats to its identity.

The idea that salmon *farming* is an unsustainable means of production challenges the organisation's main claims of strength (which are its healthy product and its contribution to the New Zealand economy) This challenge initiates sensemaking processes for internal stakeholders in reconstituting the organisational identity. The identity is maintained through challenging the facts of the argument and emphasising the beneficial aspects of the organisation. The organisation is attempting to manage these contextual issues by arguing its side of the debate and by following the resource management process to allow it to open further farms in the Marlborough Sounds.

The premium/quality theme is perhaps driven purely by marketing decisions as the company encourages consumers to justify paying the higher price, especially in the restaurant trade. These "premium" qualities still support the image but are more arbitrary than the scientific or rational underpinnings such as those in the health and sustainability themes.

Implications and Contributions

This study has shown that functional food, at least in this case, could have an important role to play in improving consumer health and that people working in the industry are genuinely enthusiastic about this prospect. None of the managers is in any doubt that the product literally provides a positive health benefit to consumers as long as the consumers eat the recommended daily quantity of salmon.

The company also has the scientific studies to support the claims it makes about omega-3 health benefits. The improved brain function, heart function, skin quality and other health benefits are no doubt desirable. The product has the added bonus of being natural and avoiding the possible health detriments caused by preservatives, colours, additives and other chemicals used in processing; although, this is not typical of the functional food category.

But this study has also shown the limitations that various contextual factors have on organisations and raised questions of whether they alone can make meaningful contributions to public health, especially when the public may not care about or understand health claims. The organisation still needs to contend with normal business constraints and manage issues that are unrelated to the health benefits of the product. In this sense, the health benefits can almost be seen as a bonus rather than the main focus of the process. The study has also paid some attention to the practical difficulties consumers face accessing healthy food.

From a communications perspective, the study provides an example of the way that notions of identity and image are affected by contextual issues and how organisational identity influences an organisation's attempts to manage important issues.

Future Research

The conceptualisation of "image" used in this study was an "intended image" based on interviews with internal stakeholders and documents produced by the organisation. Botan and Soto (1998) state that the interpretation of any message ultimately depends on the receiver rather than the sender; therefore, qualitative research that asks *consumers* to comment on the organisational image could provide valuable additional information. The consumers could also be tested for health literacy to see if this affects the way that they interpret scientific messages or modifies their actual behaviour.

Other case analyses using a similar method and theoretical framework could provide additional information about the food industry's role in public health. EnZed Salmon is a unique example of an organisation producing a functional food and a natural product at the same time, so producers of foods that fit squarely in either category could be usefully examined.

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