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ETHICS AND ECONOMICS: THE ROLE OF
INFORMATION IN THE EGG MARKET
IN PALMERSTON NORTH

A thesis presented in partial fulfilment
of the requirements for the degree of

MASTERS OF PHILOSOPHY (BUSINESS STUDIES)
at Massey Univeristy, Palmerston North

MIRIAM ANNE JANETT

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ABSTRACT

This research examines the relation of ethics to the economic model, focusing on how producers with ethical standards above those stipulated by law will need to use information markets to communicate their product's existence to consumers. Taking the pro-competitive view of advertising, Davis, Kay and Star (1991) **hypothesise** that there are four types of goods, each of which falls into a certain advertising/sales (AS) ratio and corresponds to a certain level of verifiable information. The goods are: search goods (with low AS ratios, and immediately verifiable information); short-term experience goods (with a higher AS ratio than search goods, and short-term verifiability); long-term experience goods (with the highest AS ratio of all categories and long-term verifiability); and finally credence goods (with the lowest AS ratio of all goods and difficulty in any verifiability). Ethical goods fall into the credence category unless their information can be verified in some way.

A case study of the egg market in Palmerston North was used to examine research questions based on these hypotheses since deregulation of the egg industry during 1986 to 1988 had led to the cessation of generic marketing and the introduction of new egg types. In particular, free-range eggs and battery eggs became differentiated, with free-range eggs perceived by some consumers as ethical, and battery eggs as unethical.

This research estimated the AS ratios for these two types of eggs in Palmerston North, using two different estimates of advertising expenditure by egg sellers in the Manawatu (producers, wholesalers, and producer cooperatives) and Palmerston North (retailers). The research also examined the verifiability of the information presented to consumers when they purchased eggs.

Although the research was a case study and was therefore limited in terms of generalisability and statistical testing, the findings were consistent with the hypotheses put forward by Davis et al (1991). The study recommends that research on a wider range of goods be undertaken to test the hypotheses of Davis et al (1991) statistically. The study also recommends that the industry improves information markets and hence product differentiation, by improving the verifiability of information on free-range eggs.

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CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

In 1986 the government deregulated the national egg industry, removing all price and supply controls from the New Zealand Poultry Board's (NZPB) jurisdiction. The Board was left with the generic marketing of and research on eggs, but in 1988 ceased to perform even these functions and went out of existence.

Deregulation saw the advent of different egg types on the market, some of which related to consumers' ethical views and beliefs of animal husbandry. In particular, free-range eggs, which had virtually not been commercially produced for thirty years, re-emerged on the market as an alternative to eggs from battery hens which some people now considered unethical.

The advent of a product which has an ethical content, and requires the consumer to believe its labelling, requires that information be provided to differentiate the new product from a generic product. This information is provided by advertising, and the advertising literature was searched for hypotheses which might relate to the ethical/non-ethical division between free-range and battery eggs. The advertising literature suggested that eggs in general would be classified as a search good, and would therefore be advertised factually with immediately verifiable information (Davis, Kay and Star, 1991; Ward, Chang, and Thompson, 1985; Nelson, 1974). The introduction of ethics however, would create a need to make consumers believe claims, and could push free-range eggs into a credence category (Davis et al, 1991). Since advertising expenditure relative to sales was expected to be low for search goods and even lower for credence goods, free-range eggs were expected to have a lower advertising/sales ratio than battery eggs. Free-range eggs were also expected to have some method of verifying claims, if any claims were made.

1.1 OBJECTIVES OF THE STUDY

The study set out to discover how much money was spent by producers, wholesalers, producer cooperatives in the Manawatu, and retailers in Palmerston North, on advertising eggs. Specifically the study investigated advertising/sales ratios for eggs in general, and for the two categories - free-range and battery eggs.

Comparisons were then made between ratios in the Palmerston North egg industry and ratios obtained from the article by Davis et al (1991). Comparisons were also made between the ratios for the two types of eggs to see whether they might conform with search and credence good ratios.

Last, since producers had the possibility of cheating and obtaining premium prices in the marketplace (Klein and Leffler, 1981), sellers of free-range eggs were expected to provide verifiable information (if possible), to reduce the possibility of cheating by non-free-range egg producers.

1.2 SCOPE AND LIMITATIONS

This study is a case study limited to retailers in Palmerston North, and producers, wholesalers, and producers cooperatives in the Manawatu during 1986-1992. Conclusions may not be generalised, and the thesis should be regarded as an exploratory study which investigates research questions based on the hypotheses of Davis et al (1991).

The research was carried out in 1992/3 with seventy-five to one hundred percent response rates from the samples and sampling frames used in the survey.

1.3 ORGANISATION OF THE STUDY

Chapter two examines the literature on ethics in relation to the economic model, on business ethics, consumer demand, and advertising. Chapter three outlines the egg and advertising industries in New Zealand. Chapter four explains the methodology used to conduct the research, and chapter five gives the results found. Chapter six offers conclusions and a summary, and outlines some recommendations for the future in terms of research and the industry.

CHAPTER TWO

LITERATURE SEARCH

2.0 INTRODUCTION

This chapter introduces and discusses the formation of the ethical environment with relation to producers. Profit-maximising behaviour and the legal structure with regards to ethics are discussed. This section then leads on to a discussion of the literature of business ethics, consumers, and advertising. The chapter ends with a synthesis of the ideas, concluding with an explanation of why the area under study was chosen, and what hypotheses were tested.

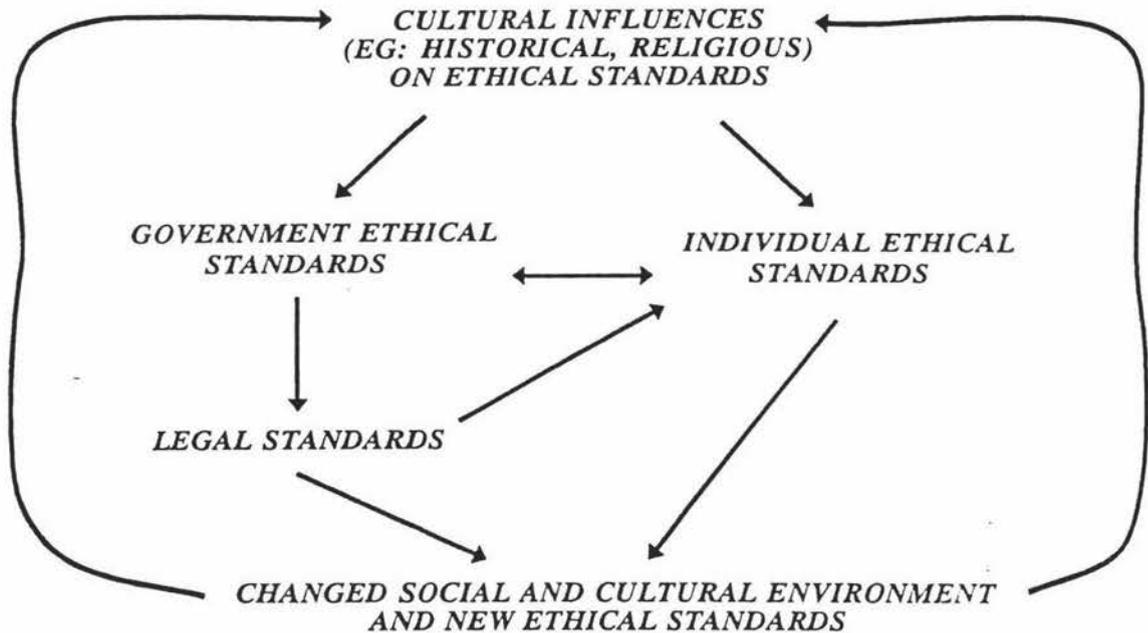
2.1 ETHICS AND THE ETHICAL ENVIRONMENT¹

Ethics are value-systems based upon individuals', groups' and societies beliefs of what constitutes right and wrong. (Kotler and Armstrong, 1991). Since value-systems differ between individuals , groups and societies, ethics are best regarded as subjective. Ethics are influenced by the cultural setting, and are subject to change over time as technological, political, and social change occurs within a society. Ethical standards are imposed by society (via the government) in the form of legislation, affecting groups and individuals in their personal and business lives. Through time, interactions between these groups will create the need for change in laws, resulting in new or modified ethical standards (see figure 2.1).

¹ The Philosophical literature on ethics, such as ~~Utilitarianism~~ is not discussed since the main aim of the thesis was to investigate how ethical standards of whatever persuasion impacted upon the economic model.

FIGURE 2.1

THE DEVELOPMENT OF ETHICAL STANDARDS



2.1.1 The Ethical Environment and the Economic Model

Profit maximisation is usually assumed to be the objective of all entrepreneurs in the neoclassical economic model of the firm. However, it is acknowledged that a debate exists in the literature regarding the profit-maximisation assumption. The realism of profit-maximisation as an assumption is questioned by some authors, who propose profit-satisficing as an alternative closer to what actually occurs in the business world (see for example, Naylor and Vernon, 1969; Berle and Means, 1967). However, the prevalence of the profit-maximisation assumption in the literature (see for example Henderson and Quandt, 1980; Baulmol, Blinder, Gunther and Hicks, 1988; Parkin, 1990) and the lack of specificity of profit-satisficing as a viable long-term means of operation, leads this research to assume producers profit-maximise.

In particular there are internal and external checks upon firms and managers which are believed to facilitate, and to an extent, impose the profit-maximising condition upon business people (Schleifer and Vishney, 1988).

2.1.1.1 Internal Checks

There are three internal checks on a firm: the Board of Directors, hiring and firing, and incentives. The Board of Directors monitors managers' performance and is one mechanism by which shareholders monitor company activity. To locate a non-profit-maximising manager the Board of Directors requires information and a profit-maximising Chief Executive Officer (CEO). For self-preservation, non-profit-maximising managers may withhold such information from the Board, which requires the threat of the second check, hiring and firing. (Schleifer and Vishney, 1988).

Hiring and firing may increase profit-maximising behaviour because managers at all levels face the possibility of replacement if they profit-satisfice. There are several difficulties here: (1) How can people be monitored and compared fairly, and by whom; (2) If the problem is a departing CEO they may have a say on who replaces them; (3) Managers and CEO's may try to become invaluable in some part of their activities; (4) As the work environment becomes less secure, managers may reduce their long-term focus, negatively affecting company investments, loyalty, and incentives to work hard for future benefit; (5) If firing managers (even for inefficiency) requires a "golden parachute" to reduce managerial opposition, company costs will rise in the short term. (Schleifer and Vishney, 1988).

The third check is to use incentives to encourage profit-maximisation. The incentives may be positive (for example a share of the profits, stock issues upon achieving a certain position within the firm, bonus payments), or negative (for example, penalties for poor performance). It has been argued however, that incentives are a bribe for managers to do what they are paid to do in the first place. (Schleifer and Vishney, 1988).

2.1.1.2 External Checks

The internal checks may not result in profit-maximising behaviour, so two external checks, competition and the sharemarket, also come into play. In the long run competition exists for every market, including imperfect markets such as monopolies.

Barriers to entry are reduced in the long run by changes in the likes of technology, knowledge, trade and the law, and if there are positive profits to be made new firms will enter the marketplace. This competition will erode the original firms market share.

Any companies that do not profit maximise under these conditions will be driven from the market place. (Schleifer and Vishney, 1988).

The sharemarket is believed to keep the balance between a company's share value and its real capital value (or expected capitalised income stream, where the real value of a share is equal to the discounted expected income stream plus capital gains, minus the present value). If an imbalance occurs, a takeover bid will correct this situation. A non-profit-maximising firm becomes a prime target because its full profit potential is not being attained. The bidder offers directly to the shareholder, although this does not necessarily rule out efforts of self-preservation by managers, at direct cost to the company, the shareholders and the acquiring firm. In the long run, non-profit-maximising behaviour will harm the company, its shareholders and the economy in which it operates. Research has suggested that declining industries are the prime targets of hostile takeover bids, and that this external threat has sometimes created a move to profit-maximising behaviour as a way to stave off the threat. (Schleifer and Vishney, 1988).

Schleifer and Vishney (1988) believe the external factors (competition and the sharemarket), are likely to impact more significantly than any internal factors (the Board of Directors, hiring and firing, and incentives). In New Zealand, the majority of businesses are small, employing between five and ten people (New Zealand Yearbook, 1992). Few of these businesses are on the sharemarket and therefore open to all internal and external factors. In this case it is assumed that competition, which has increased since the deregulation of the New Zealand economy post-1984 (Crocombe, Enright and Porter, 1991), will be the major instrument in maintaining profit maximising behaviour.

Ethical considerations enter the economic model via: (1) the legal environment in which the economic activity occurs; and (2) the utility functions of the economic agents (firms, individuals and government).

2.1.2 The Legal Structure and Ethics

The legislative framework of an economy determines what ethical standards firms are required to comply with at various levels of production. (See figure 2.2).

FIGURE 2.2

MODEL OF PRODUCTION AND LEGALLY IMPOSED ETHICAL STANDARDS

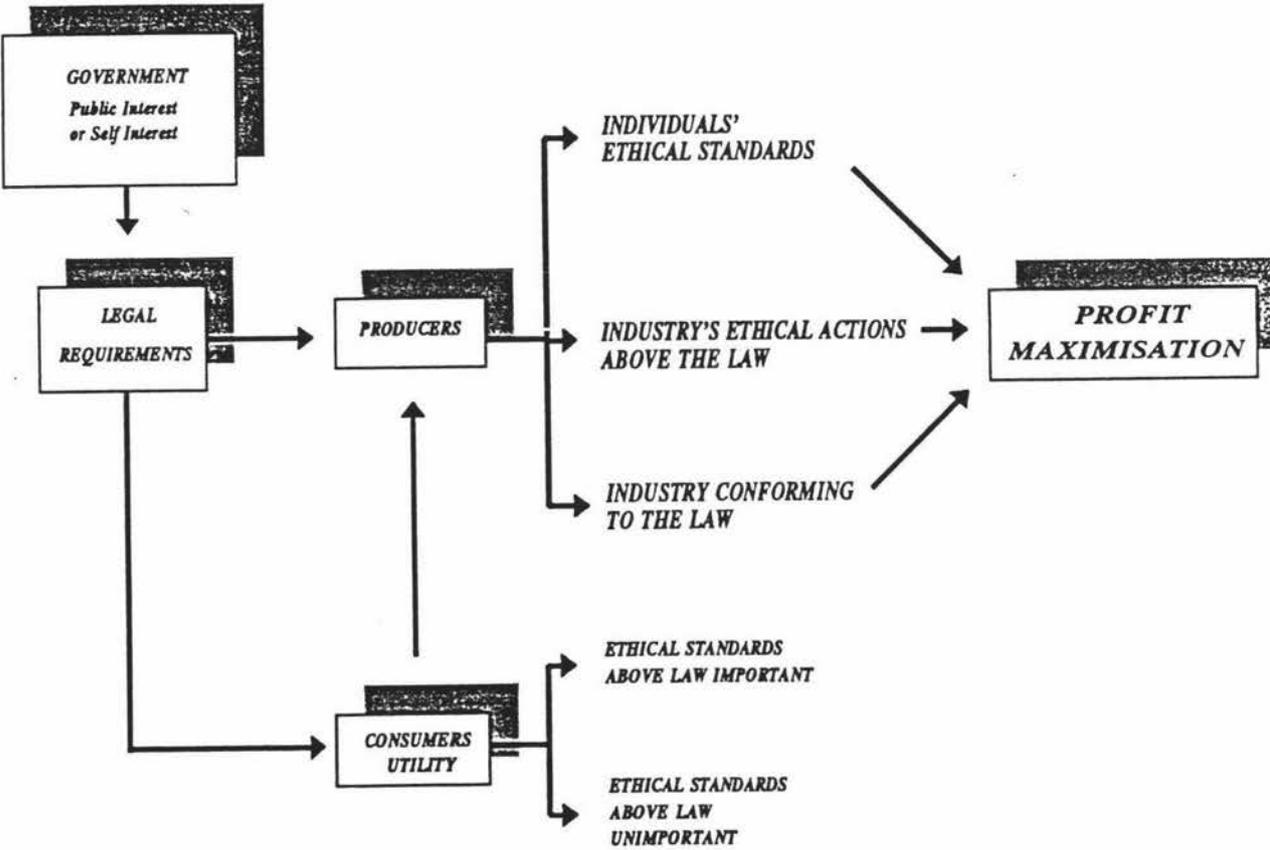
BUSINESS ACTIVITY	LEGAL REQUIREMENTS
PRODUCTION	Prevent: Demerit goods (eg. drugs) Allow: Merit goods (eg. milk)
TREATMENT OF INPUTS *Human *Non-Human	eg: Health & Safety Laws eg: Laws banning or limiting animal testing
RELATIONSHIP OF ECONOMIC AGENTS *Producer/Producer *Producer/Consumer *Government/Producer *Government/Consumer	eg: Anti-Trust Law eg: Fair Trading Act eg: Rent Seeking eg: Health & Safety
EXTERNALITIES	Tax or Regulation or the Assigning of Property Rights

2.1.3 Utility Functions and Ethics

Ethical expectations beyond legal requirements will be reflected in the utility functions of the economic agents whose actions influence each other through time. A consumer

may maximise utility by purchasing a good or service from a company perceived to have high ethical standards (for example, buying dolphin-free tuna). Producers are constrained by laws, their own and their industry's utility functions, and by the need to profit-maximise. The government, who sets the legislation, has two possible models of utility: public interest or self interest. These three agents (the consumer, producer and government) all impact upon one another and the profit function. This can be illustrated with the use of figure 2.3.

FIGURE 2.3
FACTORS INFLUENCING ECONOMIC AGENTS
UTILITY FUNCTIONS AND THE PROFIT FUNCTION



Under public interest theory, the government is assumed to be an all-knowing body, able to correct market failure with consistently successful results. Alternatively, the self-interest model acknowledges three important aspects: (1) That in reality a government has a limited area in which it can successfully intervene; (2) that the majority of voters

are placed on the centre of a political spectrum; and (3) that rent-seeking by lobby groups exists. (Gwartney and Stroup, 1990). The self-interest model will be the assumed model for government. Governments' are therefore assumed to provide "ethical legislation" in response to voter pressure.

2.1.4 Producer and Consumer Ethics

In a competitive market all producers must meet the set legal standards, and competing firms will face equal costs in fulfilling the requirements of the law. The costs may or may not be passed on to the consumer. Producers individual ethical standards and those of their industry are likely to affect their profit function. If an individual producer maximises utility by adopting ethical standards above the law, and thereby increases his/her costs, and if this position is not adopted by the industry, the ethical producer will be at a competitive disadvantage.

However, if we assume that consumers gain an increased utility from buying goods or services from a producer with ethical standards above the law, then ethical behaviour may have high returns to it if the producer can charge a premium price. However, there is no guarantee that higher revenue will be generated. The ethical producer will either have to ensure (through information markets) that the product is known as an ethical product, and charge accordingly, or remain at a disadvantage and eventually leave the market. A further possibility is that consumer pressure may change the law to affect all firms in the industry.

2.2 BUSINESS ETHICS

There is a substantial literature on business ethics, the majority of which fails to offer precise definitions of the terms used. Authors often assume that their readers share a consensual definition of ethics and therefore fail to define the term in their writings (Lewis, 1985). This practice persists despite the recognition that no true consensus on ethics exists between individuals and groups either nationally or internationally (Lewis, 1985; Stevens, 1984; Friedman, 1980; Spencer and Butler, Jr., 1987). The fact that business ethics exist in the form of legislation is rarely queried, but beyond this, the subjective nature of business ethics precludes generalised definitions, although most writers offer these.

For example Arlow and Ulrich (1980, p21) split the field into personal ethics ("the commitment to personal integrity and honesty in business" and the obedience of laws pertaining to business) and social responsibility ("an individual's commitment to accept the ethical responsibility for the social effects of [their] business decisions"). Lewis (1985, p381) believes "*'business ethics' [are] the rules, standards, codes, or principles which provide guidelines for morally right behaviour and truthfulness in specific situations.*" [italics used in the original]. Hosmer (1984, p315) sees business ethics as being above "normal personal obligations to speak the truth and observe the law"; while Hattwick (1986) draws a distinction between ethical duties (such as those stated by Hosmer) and ethical ideals.

Hattwick points out that ethical duties (and ideals) are influenced by the cultural setting, which is subject to change over time. Over both the short and long run other influences which impact upon the culture (such as technological, economic and political change) must be allowed for in any definition. Hosmer's term fails to take account of these changes which will influence the ethics of business and the society in which it operates.

Even if there are no major political, economic, or cultural changes occurring, managers do not operate their businesses in isolation. The industry (marketplace) in which firms exist will have its own set of ethical norms. In a competitive market, legislation is

needed to avoid the possibility of low ethical standards or free-riding by members of some industries (Haas, 1979; Sanderson and Varner, 1984). This legislation equalises the costs each firm in an industry must face in obtaining a set standard, giving no one firm a cost advantage from that stance.

A firm which adopts ethical standards above the industry norm may face a long run cost disadvantage, ultimately having to choose between reducing their ethical standards or leaving the industry. Hence, definitions of business ethics need to recognise that managers' (and therefore firms') individual ethical behaviour is also influenced by the industry's level of ethics. (Cottrill, 1990; Hattwick, 1986).

This industry level perception, coupled with the growth of organisations, has seen the development of business social responsibility (BSR), a term used interchangeably with business ethics, shifting the ethical focus from the business person to organisational decision-making (Vogel, 1991). This has merely added to the debate on appropriate definitions in the field, for BSR is also value-laden and open to personal interpretation (Spencer and Butler, Jr., 1987). Authors have argued various aspects of BSR, the major point of contention being from an economic view. Barach and Elstrott (1988) and Drucker (1987) argue that businesses have the responsibility to generate wealth, not give it away. However, Vogel (1991) disagrees that BSR is purely philanthropic, arguing that businesses expect some long term return from this activity, which may class it as a type of investment. Reilly and Kyj (1990) believe that economic requirements (efficiency and profit-maximisation) and ethics are mutually exclusive and that bringing these two fields together will require the redefinition of basic economic principles such as Pareto Optimality, externalities and so on.

McGuire (1963) and Davis (1960) (cited in Spencer and Butler, Jr., 1987) believe that businesses have social responsibilities above their economic and legal obligations. Spencer and Butler, Jr. (1987) however, define four categories: economic, legal, ethical and discretionary, which make up BSR, but this merely confuses the issue of definition. Economic performance is defined as a requirement to stay in business, and as already pointed out, there are writers who see this as socially responsible in itself. The need to

obey legal requirements is not disputed and is favoured as it equalises ethical costs across an industry and provides protection from exploitation.

The point of contention lies in the last two categories. 'Ethical' is defined as "meeting societal expectations" (Spencer and Butler, Jr., 1987, p574) - yet this must include profit-maximisation and meeting legal requirements. It is not specified how societal expectations will be defined nor by whom. Given the assumption that laws reflect society's wishes to control possible exploitation by business, it is unclear what other societal expectations are being referred to. 'Discretionary responsibilities' are defined as "taking voluntary actions that may exceed public expectations" (Spencer and Butler, Jr, 1987, p574). If society has high expectations of ethical responsibilities how much higher is discretionary behaviour meant to go? Even if societal expectations are equal to economic and legal requirements, voluntary actions will affect a company's costs and raises the problem of uneconomic behaviour (such as unequal costs across an industry) and free-riding. If societies expectations are being met by the ethical, legal and economic standards of the company, any discretionary behaviour may not obtain short or long run returns from consumer behaviour.

In effect, much of the literature in this field is conjecture about the way in which society and businesses interact in order to implement the ethical standards set by law and the personal ethics of economic agents in relation to production. The role of the consumer, who will be the final arbiter of whether an product perceived as ethical is purchased in preference to a product perceived as unethical, is largely ignored.

Section 2.3 therefore explores the literature on the consumer and argues that ethics will enter the demand function primarily through tastes, thereby influencing producer decisions.

2.3 CONSUMERS

2.3.1 The Standard Consumer Model

The standard consumer demand model begins with utility which is a function of some quantity x_i , where $i = 1$ to n .

$$U = f(x_1, x_2, \dots, x_n) \quad (2.1)$$

The maximisation of this utility is constrained by the consumers income, giving:

$$U_{\max} = f(x_1, x_2, \dots, x_n) \text{ constrained by}$$

$$Y = P_1x_1 + P_2x_2 + \dots + P_nx_n \quad (2.2)$$

(Comanor and Wilson, 1974)

Given this budget constraint and rational consumers, a consumer will have a simplified demand function:

$$x_i = g(P_1, P_2, \dots, P_n; Y; T) \quad (2.3)$$

where: P_n = the price of good n

Y = income

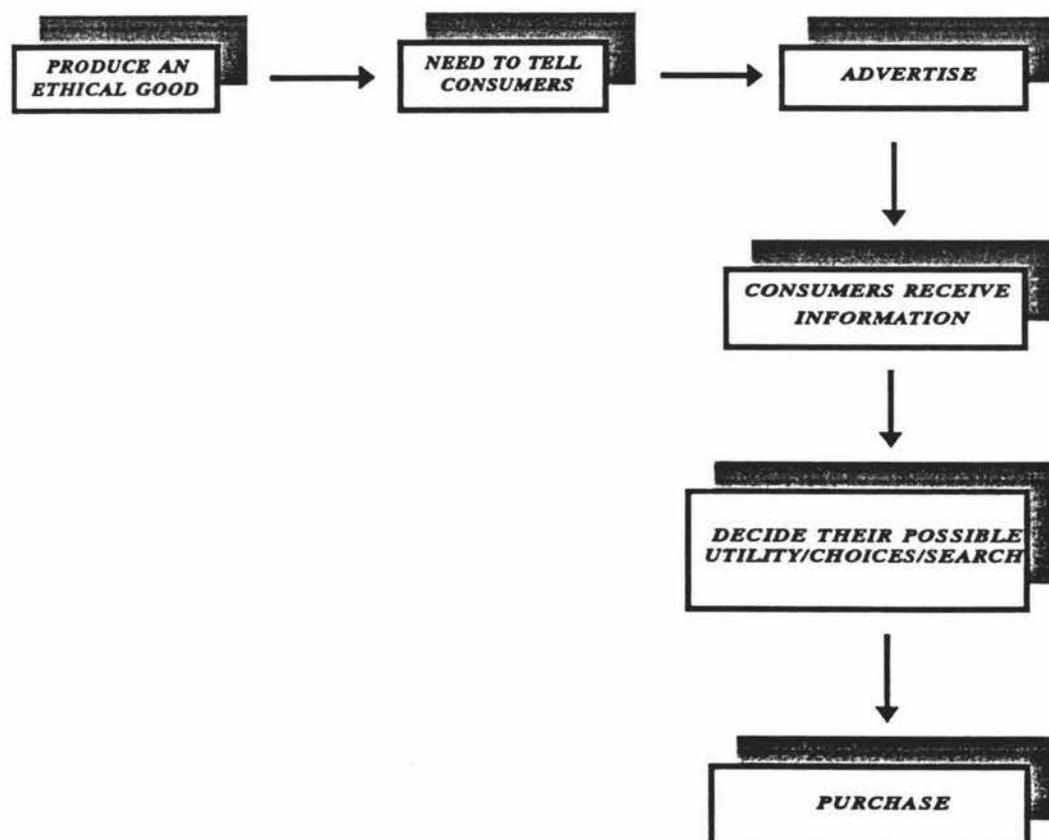
T = tastes

2.3.2 Ethics and the Consumer

Ethics are expected to enter this function primarily through taste, with the consumer deciding to purchase or not to purchase an item based upon the value they place on the ethical content of a good. Tastes will influence both the demand for good x_i and the utility obtained from its purchase and consumption, although the ability to indulge these tastes are constrained by the price of x_i and the income available to the consumer.

Tastes are also a function of information, since for consumers to be aware of the standard of ethics in good x_1 , they must be informed of the goods existence. If enough consumers buy goods they believe to be ethically produced this will have an effect on the market demand curve and therefore on producers' production decisions. Hence, producers may develop goods with ethical content in response to consumer demand or alternatively, they may be innovative. Producers can not ignore consumers perceptions of a good's ethical content, as evidenced by, for example, the 'green' movement today. As consumers' perceptions change, so will their tastes, and producers will have to adapt their products to be ethically desirable, or create ethically desirable goods. In either case however, producers will want to convey this information to both current and prospective consumers, to ensure that revenue rises as production costs do. (See figure 2.4)

FIGURE 2.4
PRODUCERS' USAGE OF INFORMATION MARKETS



2.3.3 Consumer Choice

Consumers face a multitude of choices in their decisions to buy goods and services, and hence face what Nelson (1970) terms search costs (gathering information about an item). He believes that this occurs to the point where the cost of searching is equal to or less than the cost of purchasing an item. Stigler (1961) defines search as the process of ascertaining the best available price of a good over a range of options, and suggests that search costs are higher the greater a person's income, and therefore people with a high income will purchase a good sooner than people on relatively lower incomes. (It appears assumed that any income-leisure trade-off is held constant [Varian, 1987]).

To some extent, shared information (for example information from friends and relatives) may be used to reduce search costs, but is not seen as a reliable source (Stigler, 1961, Nelson, 1970). Direct searching provides information on the price and appearance of an item, but does not impart any definite information on quality (Nelson, 1970; Hey and McKenna, 1981), although the issue of a positive price-quality relationship will be dealt with further on. Nelson (1970) believes a consumer's elasticity of demand will depend upon the amount of information they discover while searching. That is, because information allows consumers to locate substitutes which will affect their elasticity of demand, more information equates to a higher elasticity of demand, while a lack of information creates relatively inelastic demand (Nelson, 1970), given the constraints of price, income and tastes.

Nelson (1970) believes that consumers combine information from search and experience (information on price and quality [Hey and McKenna, 1981]) to obtain the utility an item offers them, and from there may rank it to other goods. In searching, Nelson (1970) defines utility as a function of the number of searches necessary to locate a good; for experience, utility is lost if a random brand is chosen over a previously discovered better liked brand. This provides a contradiction as a utility maximising consumer would be behaving irrationally to randomly try a good that is not guaranteed to be equal to the known good. According to the optimal purchase rule, consumers are assumed to maximise utility at the point where price equals marginal utility (Baumol et al, 1988). Nelson (1970) believes the point of maximum utility occurs when the

marginal cost of information is less than or equal to the marginal revenue of information from searching and experiencing. While search costs (S_c) are not explicitly mentioned, they are included in the total 'unobserved' price, P_u , where:

$$P_u = P_o + S_c$$

Search costs, in turn, are a function of information and the time it takes to obtain that information.

Producers want to maximise profits and it is held that advertising is an effective way of increasing the sales of a product (Benham, 1972; Nelson, 1974). Hence, for firms that advertise, profit maximisation is said to occur when the marginal cost and marginal revenue of advertising are equal. Misleading advertising may occur but Nelson (1974) argues that a consumer will not buy an item which is different to its advertised aspects. Hence the producer loses sales and future credibility from giving false information, and this is believed to necessitate truthfulness (Ford, Smith and Swasy, 1986; Davis et al, 1991; Nelson, 1974). Nelson argues further that given either (1) that consumers belief in the truth of a statement will leave the planned initial purchase unchanged, or (2) that it costs the producer no more to tell the truth over a falsehood, profits will be maximised when the true information is told.

2.3.4 Quality

The issue of a product's quality will be built into consumers' tastes and is therefore a subjective factor. As a subjective term, it is open to interpretation (Stigler, 1961).

Oxenfelt (1950) suggests that the difficulty in measuring or defining the concept of quality has limited economists enthusiasm for exploring the area because consumers hold different perspectives of what quality is. The literature in the field is as varied. For example, Smallwood and Conlisk (1979) examine quality in terms of a good's probability of inadequate performance (known as 'breakdown'), where it is assumed only experience can impart this knowledge. Davis (1990) and Davis et al (1991) state that the producer of a good will know what the quality of that good is, and that repeat

purchasing and the willingness to commit resources to advertising signals the level of quality, but the term itself is not defined. Gabor and Granger (1966) do not offer any definition, and neither does Tull, Boring and Gonsior (1964), although the latter believe consumers calculate quality based upon given information and "a set of criteria ... established for judging the product" (p186). Oxenfelt (1950, p300) offers something similar by stating "Product quality consists of all attributes of a product which yield consumer satisfaction." This idea is echoed by Klein and Leffler (1981) who propose that quality is made up of all characteristics a consumer finds desirable.

Gerstner (1985, and his references) believes that the market provides signals of quality via advertising, branding of products and price. These signals do not reveal everything about the products, for if they did so, search would become obsolete (Grossman and Stiglitz, 1980, in Gerstner, 1985). Advertising may impart an expectation of what quality a product may have, strengthened by brands and trademarks. Brands are given to products for a variety of reasons, some of which are to retain consumer loyalty, encourage repeat purchases, and establish a perception of quality (Kotler and Armstrong, 1991). The use of brands may enable higher prices to be charged, sending out false signals to the market as only informed consumers will be aware that the higher prices may have equal or less quality to, for example, an unbranded or lesser known good (Gerstner, 1985). [This argument ignores that the quality factor may include a prestige element from purchasing a particular brand, although this issue will be ignored and non-prestige goods will be assumed to be the items in question].

For the purposes of this research the Oxenfelt (1950) and Klein and Leffler (1981) notion shall be adopted. Hence, ethical content may be considered a factor of quality, a characteristic the consumer desires in the product they purchase.

Research has been done into the notion that there is a positive correlation between price and quality, a state Gerstner (1985, p209) believes may be expected from a "perfectly functioning market". Oxenfelt (1950) found relatively weak correlations between price and quality for most of the products he researched, for while more

expensive goods can be of superior quality to cheaper goods, the opposite was just as likely to be true. However, Leavitt (1954) and further research based upon his work by Tull et al (1964), found that the consumers in their samples did use price as an indicator of quality, especially when there was a large degree of uncertainty in their purchasing decision (for example, buying a previously untried product). This notion is echoed in the work by Gabor and Granger (1966) who used two methods (upper and lower price limits and three verbal classifications) to categorise various products; and by Nelson (1970) who believes that consumers operate on the price-quality premise until they have experienced an item. After experience, consumers evaluate quality based on price and experience which allows them to discover the true utility the product offers to them (Nelson, 1970). It should be noted that the generalisability of most of these findings, both across consumers (acquaintances of the researchers, homemakers and military personnel) and products (mainly groceries and some carpet) does not appear to be that high.

2.3.5 Conclusion

A producer's behaviour is constrained by profit-maximisation, the need to obey the law, their own and their industry's ethical standards. Whether or not a producer is responding to consumer demand or innovating, by supplying a product with an ethical content for the market place, consumers' perceptions will be of interest to the producer, since these feed into consumers tastes, which influence their demand curve. The production of a good with ethical content a producer believes will be valued by consumers necessitates that consumers are informed of the good's existence. This information is believed to reduce consumers search costs, and given the assumption that a good's ethical content is a desirable characteristic, provides information on quality.

Therefore, information markets are a major key in understanding ethics and the producer, and it is to this field we will now turn.

2.4 ADVERTISING

2.4.1 Introduction

Under pure competition, it is assumed that all economic agents operate with perfect information (Baumol et al, 1988), so any information communicated to consumers and producers must be true and complete. Since pure monopoly is the polar case of imperfect markets this implies that information markets either act as a barrier to entry or are irrelevant. The focus of the discussion is therefore on the non-polar imperfect markets, where information is not perfect for either consumers or producers, and where no one firm holds a monopoly.

Advertising under conditions of oligopoly or monopolistic competition may be viewed from one of two perspectives, competitive or anticompetitive. It is argued that advertising encourages competition by informing consumers of items availability, prices, sellers and location (Telser, 1964), thereby reducing their search costs. In this situation, Nelson (1974) argues that consumers hold power in the product market. Alternatively, advertising may be anticompetitive by creating barriers to entry. New producers entering an established market do so at considerable expense to make consumers aware of their product and gain a market share (Ward et al, 1985; Albion and Farris, 1981). In this situation, Nelson (1970) believes producers hold more power relative to consumers and new would-be producers.

2.4.2 Types of Goods

Before discussing the two views of advertising, it will be useful to point out the three different types of goods discussed in the literature: search goods, experience goods, and credence goods.

Nelson (1974) defined search goods as those items whose qualities consumers could determine prior to purchase, a definition echoed by Davis et al (1991) who define search goods as goods which consumers may easily discover the worth of purchasing. These definitions fit Ward et al's (1985) notion that search goods are usually advertised

factually as consumers can accurately appraise the item against any claims. However, Porter (1976), in Ward et al (1985) believes search goods are inconvenience goods (not readily accessible) thereby requiring direct information to promote product differentiation.

Porter's ideas do not readily coincide with the previous authors views, as the underlying factor of search goods seems to be the ease of item location and assessment. Porter may be using search goods in a different context to the others whereby a search good is one that has a high search cost. If so, this explains the necessity of advertising, although Davis et al (1991) claim that search goods are advertised lightly because consumers can assess a good accurately before purchase, an idea which fits in with earlier literature. Hence, it is this view, not Porter's which is accepted in this study.

Nelson (1974) and Ward et al (1985) define experience goods as items that need to be purchased to be fully evaluated. Nelson (1970) argues that experience combined with price information enables a consumer to evaluate their utility from the item, an idea that is not apparent in his later work. Unlike search goods, advertising is expected to be indirect, and the goods affordable to experience. (Ward et al,1985).

The expense aspect of experience goods has lead to a distinction between short term experience goods (where one purchase will enable a decision about a repeat purchase), and long term experience goods (where time is needed to ascertain the effectiveness of the good). These distinctions are offered by Davis et al (1991) and hold strong face validity although their categorising of cars is open to debate (see below). Davis et al (1991) believe that long term experience goods are advertised more heavily than short term because of the consumers need for time in experiencing the good and to indicate that the goods will be in existence for a length of time.

Finally there are credence goods where consumers are assumed to lack the ability and expertise to judge quality and their need of the good or service. Experimentation is not usually possible because the cost is much larger than the benefit, or because of the nature of the good or service, such as surgery (Ford et al, 1990). Davis et al (1991) place consumer durables (for example cars, stereos and whiteware) in this area, claiming that such items are lightly advertised because purchase is either one-off or infrequent.

Aside from any philosophical issues of 'needs' and 'wants', Ford et al's (1990) use of 'need' is not compatible with Davis et al's (1991) use of consumer durables.

It must be assumed that consumers purchase a car, washing machine and so on because they do perceive a need for it. The same may be argued of surgery, health related or cosmetic: people will have been diagnosed as having a need for their health (for example a hernia operation) or will perceive they need surgery for their own well-being (for example cosmetic surgery). Given this study's assumption that quality is a number of desirable characteristics, a consumer's lack of ability to judge quality is a questionable proposition. However, because credence goods do have a high technical level and are usually expensive, or alternatively, require the consumer to believe information about them, the existence of credence goods will be accepted.

Evidence for these criteria is based upon "advertising/ sales [AS] ratios and purchasing frequency" (Davis et al, 1991, p11). The AS ratio is the ratio of money spent on advertising a product with respect to the money value of total sales, expressed as a percentage. For example, Davis et al (1991) calculate that if a product is bought more than once a week, the average value of the AS ratio is 0.86. Hence, for each one dollar of sales, only 0.86 of a cent is spent on advertising.

This method was also used by Telser (1964) who, while agreeing that the advertising-sales ratio gives a measure of advertising intensity, queries its relevance to the car industry. Telser (1964, p544) states that in the automobile industry the advertising/sales ratio was 0.525 in 1948, 0.566 in 1954 and 0.907 in 1957, yet "the absolute advertising outlay was \$100 million in 1954 and incorporated dealers spent \$192 million advertising both new and used cars.". By 1957, retail and manufacturing car advertising was \$390 million. The Economist (1992) also used cars to query Davis et al's (1991) low (1.58) ratio, pointing out that in America in 1990, \$6 billion was spent advertising cars.

It may be that cars are an anomaly, being both a credence good and to an extent, an experience good. This notion fits in with both definitions: technically, the average consumer may not be an expert, nor able to change cars frequently (hence cars are a

credence good); but after owning the vehicle they will know how well the car runs, how many times it needs repairing, its mileage, road handling and so on. In addition, the results presented do not specify whether different classes of cars (for example, luxury or economical) are separated in the data. (That is, it would be interesting to observe the ratio of each car classification).

Despite some of the limitations raised above, the ratio is accepted by Telser (1964), Davis et al (1991) and the Economist (1992), and for that reason has been included here and will be used further on. The ratio results are used to determine how much advertising will occur over product categories. Search costs (see section 2.3.3) are believed to rise as goods become less verifiable (Davis et al, 1991), although advertising is thought to be heaviest for experience goods and light for search and credence goods.

We will now turn to the different views of advertising: informative (the competitive view of advertising) and as a barrier to entry (the anti-competitive view).

2.4.3 A Competitive View of Advertising

Writers with this view of advertising share the belief that advertising always, even to a minor extent, conveys information (see for example, Ward et al, 1985; Davis et al, 1991; Telser, 1964; Kaldor, 1950; Ozga, 1960), and therefore reduces consumers' search costs (Nelson, 1970). The focus of the discussion tends to be on consumer goods as opposed to producer goods, since consumers are believed to be more widely dispersed than producers (Ward et al, 1985). The information advertising conveys is therefore of use to buyers, enabling them to find products, characteristics of those products, identify sellers, and terms of sale (Ward et al, 1985; Telser, 1964; Davis et al, 1991).

Telser (1964, p539), points out that "advertising is an input supplied together with the physical product", which therefore offers consumers information additional to their examination of an actual item. Kaldor (1950) provides three reasons why advertising

is different to other information markets (such as the stockmarket): Firstly, the seller of the advertising is also the seller of the good or service; secondly, a good's price inherently includes the cost of advertising because additional demand is expected from advertising, therefore provision of the information costs a consumer nothing; and thirdly, the amount of information varies depending on what market is targeted, the medium used, and the amount of information given.

Therefore, Kaldor advances that search costs are reduced at no cost to the consumer, although the amount of information will vary, most likely with the type of good (Davis et al, 1991). While the amount of information will differ, writers in this field agree that competition necessitates truthfulness in advertisements. For example, Ford et al (1990) believes that the market punishes untruthful advertisements, while Davis et al (1991) believe false information will be found out through both repeat buying and regulations. Hence, time is a factor in ascertaining the truthfulness of advertising (see section 2.4).

Consumers are not portrayed as ignorant and are believed to be sceptical of uncheckable information offered to them prior to purchase. However, consumers are not believed to be so sceptical of credence and experience goods. (The notion here is that the latter two goods are used and a judgement made about the actual product and the advertised information). Davis et al (1991, p5) also state that consumers "have no reason to believe things that are said in advertisements which could never be verified". To them, this is classed as "sensible" (p7), or rational, behaviour.

Hence, if a good is advertised as ethical and this can be verified prior to purchase, extravagant comments are not expected to occur because consumers will not believe them. If, however, the information is not verifiable, or is only verifiable in the future, consumers are more likely to believe producer claims.

2.4.4 An Anti-competitive View of Advertising

This literature advances the thesis that advertising creates barriers to entry by affecting costs, demand, prices and market share (Kaldor, 1950; Comanor and Wilson, 1974; Albion and Farris, 1981; Bain, 1965). Bain (1965) asserts that barriers to entry exist if

any (or all) of three conditions are fulfilled in a market place: (1) established firms have an absolute cost advantage over new or potential entrants; (2) established firms hold product differentiation advantages over new entrants; (3) economies of scale are a major factor, whereby one firm may hold a large part of the market. Hence, barriers to entry focus on advantages existing companies in a marketplace are believed to have over potential entrants, enabling established companies to set their prices above a competitive level without encouraging other sellers to enter the market (Bain, 1965).

COSTS

Comanor and Wilson (1974, p41) believe the question is whether advertising creates "differential advantages" between established and new firms, allowing the former to set high prices without attracting new competitors to the marketplace. These "differential advantages" are in the form of costs, whereby established firms could, if they chose, exclude new entrants from the market (*ibid*).

Albion and Farris (1981) divide these advertising costs into absolute (obtaining funding to finance advertisements) or relative (a new entrant will have to spend more, at a greater risk, to obtain a market share equal or less to that of an existing firm's), and believe (as does Ward et al, 1985) that these costs create barriers to entry. That is, if heavy advertising is needed for new entrants to market their brand and gain market share, this forced expenditure lowers market competition, causes prices to rise, and increases profits to existing firms. (Albion and Farris, 1981; Kaldor, 1950). This notion is tempered by Comanor and Wilson (1974), who believe that while a full-frontal market attack would be countered by established firms, encroachment on the periphery of a market cannot be stopped.

The barrier to entry argument therefore moves beyond just advertising costs to production costs. Even if new entrants appear only on the fringe of a market, their production costs are still likely to be higher than established companies who must, by definition, have a higher market share and lower per unit cost than the new entrant (Comanor and Wilson, 1974). It is thought that time is a factor in this advantage: an established firm may have evolved efficient production techniques which are unavailable

to the new market entrant (Bain, 1965).

Bain (1965) also believes that the advent of new entrants is likely to push up factor prices, increasing production costs. Bain (1965), Ward et al (1985), and Comanor and Wilson (1974), argue that this favours established firms who are likely to be able to obtain capital at a lower interest rate than new entrants. A major factor of this may be new entrants lack of information - they do not know how profitable it will be for them in the marketplace, and cannot guarantee any real return on their expenditure. Hence, because spending money on advertising does not provide any tangible assets that may be sold should the market bid fail, new entrants may find it difficult to obtain capital (Comanor and Wilson, 1974).

The literature on business ethics also believes that ethical production is more costly than usual production (Drucker, 1987; Jayne, 1992). Hence, a new entrant which aims to produce at higher ethical standards than an established producer will face higher setting up costs, but may, in addition, need a large advertising expenditure to break into the market place. With no guarantee of success, obtaining this finance may be difficult.

DEMAND

Advertising's effect on demand is considered to be another barrier to entry (Kaldor, 1950). Ward et al (1985) identify two types of advertisements: brand specific and generic. It is suggested that brand specific advertisements encourage barriers to entry whereas generic advertisements reduce them, because generic advertisements focus attention on a class of commodities, not a specific item. Hence, generic advertisements are believed to increase aggregate demand for a commodity class, while brand specific advertisements will only affect the demand of that item (Ward et al, 1985). Hence, what occurs is increased product definition which therefore reduces goods substitutability (Kaldor, 1950) but creates brand loyalty (Bain, 1965), increasing the difficulty new entrants will have in breaking in to a market (Bain, 1965; Albion and Farris, 1981; Comanor and Wilson, 1974).

As ethical content becomes important, and especially if it becomes associated with a

brand, advertising may reinforce product differentiation and hence reduce substitutability between goods.

Further, Comanor and Wilson (1974) point out that product differentiation is not only a factor of advertising. Established firms' policies (both past and present) on aspects such as advertising, design, servicing, distribution and so on, will also be factors in brand loyalty. To this extent, Comanor and Wilson argue that existing firms in a market are likely to have a direct impact on each other's demand (and hence competition in the marketplace) as well as effecting new entrants.

PRICE

A discussion of demand must also examine what happens to price. Albion and Farris (1981) believe that decreasing close substitutability by product differentiation via brand advertising, makes branded products more price inelastic, a point reiterated in Kessides (1986), who believes these goods cross price elasticity of demand will fall. (That is, the cross price elasticity of demand will move closer to zero [Parkin, 1990]). If the cross price elasticity of demand falls so the quantity demanded of good X remains constant despite the price of good Y (ibid), then face validity applies to Kaldor's (1950) and Albion and Farris's (1981) belief that production differentiation lowers price competition between firms.

MARKET SHARE

If costs, demand and prices are affected by advertising, the overall impact on market share is also a factor. Albion and Farris (1981, p34) take an oligopolistic view, stating that if there are only a few firms in a market, they may reach an agreement whereby competition occurs on "non-price dimensions, such as advertising, product quality, packaging" and so on. A clear oligopolistic view aside, Ward et al (1985) argue that by increasing product differentiation and focusing attention on one brand, market share for that brand will rise, in addition to prices and therefore profits rising. As market share increases, economies of scale for firms also grow, lowering per unit costs and placing new entrants at a disadvantage (Bain, 1965).

Gomes (1986) points out that this growth in market share may not favour small established companies, by blocking their ability to grow at the same time new entrants are prevented from joining the market place. As market concentration grows, collusion between larger firms is possible, again, blocking small and new entrant firms by increasing the minimal operation size of the firms in the market place, and resulting in profits and prices rising (Kaldor, 1950; Gomes, 1986; Albion and Farris, 1981).

Hence, advertising will at all times be informative, although it may be competitive or create barriers to entry.

2.5 SUMMARY

2.5.1 Advertising

On the assumption that advertising contributes to information goods may be classified into four information-dependent categories. These are: search goods, short term experience goods, long term experience goods, and credence goods. Hypotheses have been developed for each of these categories by various researchers, notably Davis et al (1991).

First, search goods. These are goods whose characteristics are easily ascertained simply by viewing the product. The only form of advertising that is useful to either a consumer or producer in relation to these goods is information about place of sale, price, quantity and so on. (Nelson, 1974; Ward et al, 1985; Davis et al, 1991). It is expected therefore that these goods will prove to have a low advertising-sales ratio. Examples of these goods are pens, jewellery, and fresh produce. (Davis et al, 1991).

However, many product characteristics are not as easily quantifiable, (for example the taste of toothpaste), nor are they immediately ascertainable, (for example the quality of canned fruit). Goods in this category are known as short-term experience goods, and since more information is needed to evaluate their characteristics, advertising expenditure with relation to sales is expected to rise. (Davis et al, 1991). It is important to note that if the good is cheap and can be evaluated by a single purchase then there is a limit to the value of advertising; a single purchase will tell the consumer all they wish to know about the product. Therefore it is expected that the advertising-sales ratio will be higher than that for search goods, but lower than that for other goods (see below).

Once a good requires repeated use to provide full evaluation of the information presented, it is classified as a long-term experience good. Goods such as shampoo, batteries and vitamin tablets fall into this category. While it is true that the length of

time required for the evaluation of a long-term product may allow false advertising to exist, the fact that the information is ultimately verifiable at the expense of the consumer could be expected to keep information markets honest in the long run. High expenditure on advertising signifies to the consumer a producer's long-term willingness to stay in the marketplace (Klein and Leffler, 1981), and therefore a high advertising expenditure with relation to sales is expected for these goods (Davis et al, 1991).

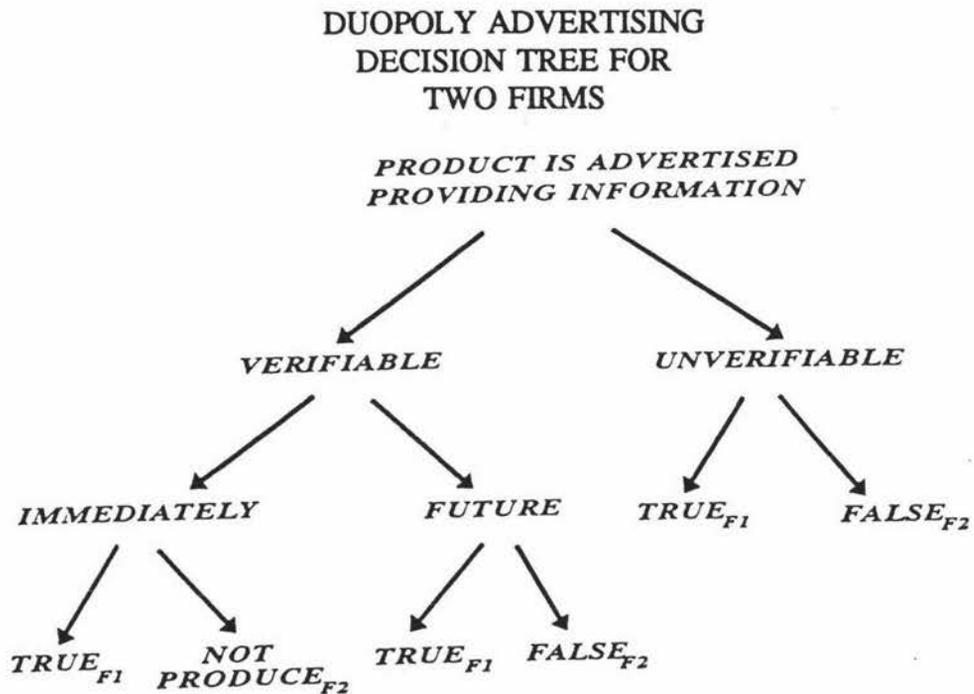
The final category of goods are credence goods. Here, even medium to long-term expenditure on the item cannot verify in a quantifiable manner the characteristic of the product, and the consumer must accept on trust the qualities advertised by the producer. Products such as whiteware and electrical appliances which are purchased infrequently, or products such as organically grown food which have ethical aspects attached to them, are believed to be in this category (Davis et al, 1991). Since a producer could claim anything, true or false, about a credence good, there is little point in spending a lot of money on advertising, aside from telling people that the product exists. Therefore, these goods are expected to have an advertising-sales ratio even below that of search goods (Davis et al, 1991).

2.5.2 Advertising and Ethics

The hypotheses in 2.5.1 place advertising firmly in information markets. Ethical issues then enter the information markets in two ways. First the product itself may have ethical or non-ethical characteristics (for example dolphin free tuna) about which the consumer may be informed. Second, the information may be true/false and may or may not be verifiable. Thus the producer of an ethical product would need to inform the consumer of the nature of the product, but would also need to prevent false advertising of a similar yet non-ethical product.

In order to illustrate this idea, a decision tree of advertising is presented below in figure 2.5 in relation to two producers, one of which has an ethical product, the other a non-ethical but similar product.

FIGURE 2.5



KEY: F_1 = Firm One; F_2 = Firm Two

For simplicity, the following assumptions are made:

First, there are two firms in the marketplace. Firm One, which is honest, produces an ethical good and always provides true information. Firm Two produces a good perceived as unethical by Firm one, may provide true or false information, and competes with the ethical producer.

Second, quality and ethics will be assumed to be synonymous. Quality is defined as a bundle of desirable characteristics, including ethical content, as perceived by the consumer (Klein and Leffler, 1981).

Third, market structures are assumed to be monopolistically competitive, or non-collusive oligopolies. Since pure competition assumes perfect information, and pure monopoly may impart as little or as much information as it chooses, neither polar market provides easily testable hypotheses.

Fourth, both firms are established with similar resources, so it is not feasible for either firm to advertise to the extent they raise barriers to entry.

It is important to reiterate that ethical perceptions and their influences will vary over time. Therefore, something that is now considered unethical by some people (such as killing dolphins while collecting tuna) may not have been considered unethical a few years ago, either because of lack of awareness or because of changing levels of social acceptability for various views, such as animal rights.

In all instances it is assumed that firm One produces an ethical good and always tells the truth. Firm Two, however, may lie at two stages, one of which relates to information which is only verifiable after repeated purchase, the other to unverifiable information.

As a result of this limited verifiability or unverifiability the advertising hypotheses in section 2.5.1 need to be modified.

2.5.3 Hypotheses on Advertising and Ethical Goods Based on Davis et al (1991)

Hypothesis One:

If a good is perceived as ethical, and consumers may verify this information prior to purchase, telling false information will be damaging to a company and will not result in sales, so only true information will be given. An ethical good in this category would be classified as a search good, and according to Davis et al (1991), advertising expenditure with relation to sales will be expected to be low for such goods.

Hypothesis Two:

If a good's ethical content may be verified in the immediate future, Firm Two has leeway to provide false information. The goods in this category equate to short- and long-term experience goods, and it is expected that the advertising expenditures will be large with respect to sales. In this situation, Firm One's (the ethical firm's) advertising expenditure may be very large if they need to convince consumers that they will be in

the market in the long-term, (Klein and Leffler, 1981) when the information is verified. The idea behind this large expenditure is that it creates a credible indication of a willingness to outstay other competitors.

Hypothesis Three:

If the ethical content cannot be verified or can only be verified in the more distant future, Firm Two still has leeway to cheat. Firm One may choose not to advertise at all, because the marginal benefit from advertising is expected to be low. Some credence goods are expected to fit this category (such as stereo volume, washing machine capacity). If a good's ethical content can not be verified, a low advertising-sales ratio would be expected, as the only information worth communicating to consumers is that the product exists. (Davis et al, 1991).

2.5.4 Hypothesis Testing and Case Studies

The hypotheses which relate directly to advertising (section 2.5.1) require a large data base for testing, such as Davis et al (1991) used. They used the PIMS data base, which is "maintained in the UK by the Strategic Planning Institute...[and] is one of the largest corporate databases available to academic users or private users...it contains...variables on a sample of over 7,000 business units over an extensive period of time." (Davis et al, 1991, p13). Davis et al (1991) were therefore able to sample large numbers of items per category to test their theories.

In New Zealand, this information is difficult if not impossible to obtain - a conclusion reached after speaking with people in the advertising industry in New Zealand. Information on sales volume and purchase frequency by product is usually commercially sensitive and not published. Expenditures by selected companies or products are published by the Ad/Media Magazine and cover the top spenders in television, print, and magazines for each year. However, no sales information is coupled with this data and the data is incomplete. Therefore, the idea of testing the general hypotheses on advertising and the more specific hypotheses on ethical goods on a wide range of goods had to be rejected.

The focus of the research therefore shifted to information verifiability in relation to one or a few ethical goods. This required locating an ethical product(s) which had competing non-ethical products, and evaluating the information supplied to consumers about these products.

Constraints imposed by the availability of information and by finance narrowed the field of enquiry to a single product and one which could be investigated in the immediate geographic area, Palmerston North. Consequently the study became a case study rather than an exercise in inferential statistics. The importance of this distinction is that no generalisation may be made from the findings outside the product and geographic area, and hypotheses could not be tested for statistical significance.

Initially, various products were investigated, for example unleaded and leaded petrol, but the search finally narrowed down to free-range and battery eggs.

Eggs fitted the requirements of the research in that they are a search good (people can verify at the point of purchase that they are buying an egg); they may have ethical or non-ethical characteristics (whether the egg is free-range or battery raised); they are sold at different prices in different retail outlets; and finally, the deregulation of the market in 1986 allowed producers to seek out potential and available consumer markets without any producer board interference. (NZPB, 1986/7). In addition, the dissolution of the Poultry Board in 1988 ended the nation-wide generic marketing of eggs, and placed the onus of marketing eggs either as a generic or differential product, on the sellers in the marketplace.

2.6 FINAL HYPOTHESES/RESEARCH QUESTIONS

2.6.1 Hypothesis One/Research Question One

As a generic good, eggs may be defined as a search good. A consumer can ascertain at a glance that (i) the item in front of them is an egg and (ii) the price with respect to quantity. (Nelson, 1974; Ward et al, 1985; Davis et al, 1991). Although the latter may require walking to a counter, this information may be considered immediate.

The literature in section 2.4 postulates that over a period of time advertising for search goods will have a low priority (Davis et al, 1991). Therefore, it is expected that between 1986-1992 eggs as a generic product will have a low total expenditure on advertising with respect to sales.

2.6.2 Hypothesis Two/Research Question Two

Differentiating eggs with respect to their animal husbandry practices requires consumers to believe that there is a difference. A free-range egg may be considered a credence good because sight and even experience of a free-range egg will not necessarily confirm its production method to a consumer, and will require consumers to individually decide whether the egg is different (King, 1992).

For this reason there are two parts to hypothesis two:

(a) Credence goods are generally expected to have low advertising-sales ratios. Therefore free-range eggs are not expected to be more heavily advertised than battery eggs, unless information can be made more verifiable to the consumer, that is, unless the goods can be moved into the experience good category. This leads to (b):

(b) Based on observations in the marketplace prior to the research, free-range eggs are usually more expensive than battery eggs. Since this allows an opportunity for passing off battery eggs as free-range eggs in order to reap abnormal profits (Klein and Leffler,

1981), it will be important to free-range egg producers to differentiate their product in a verifiable way.

Therefore, it is expected that a survey of retail outlets in Palmerston North will show that information on free-range eggs is verifiable, so as to reduce the possibility of producers cheating. This information may be a farm address people may visit, a Ministry of Agriculture and Fisheries (MAF) approval, an industry stamp of approval, or legal proceedings.

CHAPTER THREE

THE EGG AND ADVERTISING INDUSTRIES IN NEW ZEALAND

3.1 THE EGG INDUSTRY IN NEW ZEALAND

3.1.1 Introduction

To understand the egg industry in the Manawatu, it is necessary to provide background on the industry in New Zealand, particularly for the period 1976-1986. The aims and arguments from the NZPB and the Industries Development Commission (IDC) will be outlined, and the outcomes these two groups expected from deregulation will be discussed. This section has drawn heavily on the NZPB submissions in 1984 and the final report from the IDC in 1985.

3.1.2 Background

The first official record of a poultry industry in New Zealand dates back to 1861, when it was recorded that a total of 236 000 birds were kept throughout the country. By 1906 that number had risen to three million. (IDC, 1985). During this time the egg industry was marked by periods of surplus or shortage, both seasonally and regionally (NZPB, 1984a). In 1933 the *Poultry Runs Registration Act* established a Poultry Board funded by levies on producers with over twenty-five birds. The aim of this legislation was to organise national egg production, moving away from local producer egg circles (IDC, 1985), thereby providing a reliable supply of eggs for the country as a whole.

World War Two (1939 to 1945) saw a shortage develop in the egg market: the agricultural labour fell as people enlisted in military service, and in the egg industry the result was reduced flock sizes and lower egg output. To counter this, the government of the time introduced various legislation during the war period to provide incentives for producers to increase egg production.

In 1939 the Price Stabilisation Emergency Regulations brought eggs under price control (a situation that did not change until 1986). While the price legislation enabled the government to increase egg prices, it was not feasible to raise them to the point where producers would eradicate excess demand. Instead, a transport subsidy was introduced to aid the supply to towns. Another subsidy was introduced in 1944, the aim again being to increase supply. This subsidy was not removed until 1976. (IDC, 1985). In 1940 the *Egg Marketing Regulations* created marketing regions, licensed egg distributors with the "commissions of both distributors and retailers...determined by Price Control" (IDC, 1985, p2). Emergency regulations were enacted in 1942, complementing those of 1940, bringing the locality of egg sales under the jurisdiction of the governmental minister. (The title of the ministerial department is not given).

In 1946 a Post-War Marketing Committee was convened to examine the organised marketing of eggs. At the end of the war emergency regulations were revoked but to avoid dislocation in the marketplace, the government commissioned a new marketing plan (NZPB, 1984b). The committee recommended that consumers and producers would benefit from some degree of control in the industry. (NZPB, 1984b; IDC, 1985). They proposed that an organisation with elected representatives from the poultry industry, government and consumers, funded by a producer levy per dozen eggs and an equalisation fund, would be established to enable orderly marketing to occur. (NZPB, 1984b; IDC, 1985).

In 1951, *Egg Marketing Regulations* set up a National Egg Marketing Committee, and in 1952 the New Zealand Poultry Board was requested by the government to take over the marketing of its own products. Further *Egg Marketing Regulations* were passed in 1953 in conjunction with the *Primary Products Marketing Act*, which established the association known as the New Zealand Poultry Board and Egg Marketing Authority up until 1980.

By 1953-1954 there were 6965 registered poultry units in New Zealand (registration was required if more than twenty-five birds were kept), although only 289 of these had over one thousand birds. During the next twenty to thirty years there was a trend away

from family organisations to larger, commercial operations. (IDC, 1985). The NZPB saw this increase in flock size as having a positive result for consumers, as economies of scale increased efficiency (NZPB, 1980/81).

3.1.3 The New Zealand Poultry Board 1976 to 1980

In 1980 a new *Poultry Board Act* was brought in, replacing the 1976 Poultry Board Act. The new Act, which came into effect in January 1981, abolished the registration of flocks and dissolved the Egg Marketing Authority, bringing its functions under the umbrella of the NZPB. (NZPB, 1980/81).

The NZPB functions were defined in section 12(1) of the 1980 legislation. In brief, these were: to run the poultry industry efficiently, to regulate supply from production to marketing to distribution, to improve egg quality and increase egg consumption by consumers.

To fulfil these requirements the entitlement system, licensed egg wholesalers and national quality and grading standards were maintained by the NZPB. The Board also invested in research, both market and producer orientated. This saw the introduction of new breeds of hens, modernised packaging, and consumer-orientated ideas such as expiry-dates, recipe cards and high profile marketing. (NZPB, 1985/6).

The entitlement system enabled the NZPB to control production by regulating the number of birds that a producer could hold. This mandatory scheme was introduced by the government on March 2 1970, "limiting all flocks of more than 1,000 birds over 6 months in age to their 2 March 1970 level" (NZPB, 1984a, p36). In 1975 the scheme incorporated five month old birds, and by January 1978 flocks over one hundred birds were required to be licensed. Producers who held more than their entitlement levy allowed were required to pay \$1.50 per extra bird per month (NZPB, 1984a).

Entitlements could be transferred, but only from surplus to shortage areas, and between 1971 and 1978 could be sold by producers leaving the industry without NZPB interference. After 1978 the NZPB once again regulated the selling of entitlements (IDC, 1985).

Funding for the NZPB was derived from four sources:

"(a) the Entitlement Levy: a maximum of \$5.00 per year on each laying bird held:

(b) the Down payment: a deduction for the Board by a licensed wholesale agent from the sum payable to a non-entitlement producer for eggs consigned:

(c) the Chick Levy: a maximum of 0.30 cents for each chick raised or imported for laying purposes:" (NZPB, 1984a, p14).

In addition, in the 1983-4 period, the entire industry except for two producers paid a \$2.527 levy per bird as part of the voluntary incentive scheme. (This scheme aimed to lower bird numbers to reduce the rate of the entitlement levy). (NZPB, 1984a). Also, as mentioned above, producers were fined an additional \$1.50 per month for each bird which exceeded their entitlement limit.

The prices received for eggs at both the wholesale and retail levels were set by the Department of Trade and Industry and updated every four years after a costs of production survey was carried out (NZPB, 1984a). During that period however, the NZPB could make an application for prices to change to keep pace with changing costs due to factors of production, typically feed prices (NZPB, annual reports, various years; IDC, 1985).

The matching of supply and demand was a major task of the NZPB, in which they had to balance three factors. First, perishability and fragility of eggs required strict quality control, storage and transport procedures. Second, birds over six-months old which were kept in a controlled environment laid all year round, with the rearing of chicks typically planned eighteen months to two years in advance. Hence, changes in the stock and therefore egg volumes had a time lag which must be taken into consideration. (NZPB, 1984a).

Third, although the market had a controlled number of birds through the entitlement scheme, this excluded backyard producers. The latter produced eggs in spring and summer, creating a surplus in the marketplace that the NZPB could only deal with through its own producers. In addition, there were peaks (such as Christmas and Easter) and troughs (after statutory holidays, in school vacation breaks) which had to be dealt with. (NZPB, 1984a).

Fourth, regional imbalances also existed, although they were perceived as being slowly brought under control by the mid-1980s with the use of entitlements and voluntary reduction schemes. (NZPB, 1984a).

As a result of these difficulties a surplus of six million dozen eggs, before local market pulp needs, was laid down by the 1973 Price Tribunal as a necessary margin to ensure control of the market throughout a year (NZPB, 1984a).

The Board believed that it had a strong case for controls, in terms of obtaining a more balanced supply and fairer price for consumers and producers than would be possible under a free-market situation. In addition, it pointed out that their intervention in the marketplace was done thoroughly: "cautiously introduced, assessed and modified with experience." (NZPB, 1984a, pp9-10).

3.1.4 Deregulation

In May 1984, the National Government's Minister of Trade and Industry, Hugh Templeton, requested the Chairman of the Industries Development Commission to review the egg industry "with the objective of promoting competition and efficiency in the production, distribution and marketing of eggs in the public interest." (IDC, 1985). This was the first review into the egg industry since 1946 (NZPB, 1984a; IDC, 1985). The Labour government elected on July 14 1984 (Wilson, 1989), did not stop the investigation. The final IDC report was handed to the Labour Minister for Trade and Industry, David Caygill, in 1985.

The IDC report recommended that all producer controls with regards to supply - price, quantities, marketing regions and the likes - be lifted. The entitlement system which dealt with stock numbers, was to be phased out by 1988, after which time producers were free to hold any number they chose. (IDC, 1985). As a result the cost of surplus production would be borne by the producers themselves, not consumers, as was the situation under the producer board. (IDC, 1985).

Distributors were to be free to buy and sell eggs from and to whom ever they chose, "at prices determined by them" (IDC, 1985, pii). Retailers could also buy from any

source, and sell at prices they wished in direct competition with other retailers. In addition, retailers would have to meet any legal standards required in the selling of eggs. (IDC, 1985).

An underlying assumption of the report was that deregulation would result in only efficient producers and distributors staying in business, which would automatically benefit consumers. In addition, making producers responsible for surplus production and transportation and the likes was seen as enabling the consumer price to fall. (IDC, 1985).

It was recommended that the Poultry Board be maintained, since they had a role "in the research, production and genetic efficiency, promotion and related areas requiring an appropriate industry organisation." (IDC, 1985, p11).

The IDC recommendations were adopted, and the egg industry in New Zealand was partially deregulated in 1986, ending fifty-three years of complete producer-board control in the egg market. The NZPB no longer controlled the supply of eggs, collected producer levies or collated information on the industry nation wide. From April 1986, the Board's functions were limited to generic marketing, research, and the handling of the phasing out of the entitlement scheme (NZPB, 1985/86; IDC, 1985). In September 1988 the entitlement scheme ended, along with all statutory powers and functions of the Board. (NZPB, 1987/8).

3.1.5 Post-1986

The NZPB noted several developments in the egg markets post 1986. From their point of view was the difficulty of obtaining information from egg floors and merchants, which made their task of research and marketing difficult (NZPB, 1986/7; 1987/88). Different types of eggs which consumers specifically wanted were being sold (NZPB, 1985/6), and eggs "were being marketed by more producers/marketers since deregulation." (NZPB, 1987/8).

In the 1987/8 annual report it was reported that the deregulation post-1986 had brought increased prices to the consumer, financial pressures to producers but increased profit margins for the retailer. The report states the astonishment and bitterness of the NZPB that the government fully deregulated the market, and reiterated that "both egg producers

and consumers of eggs throughout New Zealand [were] going to be the major losers..." (NZPB, 1987/8, p6).

The Board was still to maintain its marketing position, and the 1987/8 annual report outlines its development for an advertisement campaign, 1988/9. However, without statutory backing to obtain funding and a lack of unanimous support from producers, the Board could no longer continue, and ended in 1988.

3.2 THE ADVERTISING INDUSTRY IN NEW ZEALAND

3.2.1 Background

The advertising industry in New Zealand is made up of approximately ninety agencies, sixty-three of them New Zealand owned, with the balance (usually larger companies) affiliated to a multi-national companies (New Zealand Yearbook [NZYB], 1992). There is an official legislated environment in which all companies must operate, with many others also following self-regulation through the Advertising Standards Authority.

3.2.2 The Legislated Environment

The Fair Trading Act 1986 is the legislation commonly used in conjunction with advertising in New Zealand. This Act relates to several other pieces of legislation, such as the Broadcasting Act 1976, the Trademarks Act 1953, and the Australian Trade Practices Act, 1974. Since the linkage is usually definitional, only the Fair Trading Act will be commented on here.

The aim of the Fair Trading Act 1986 (hereafter referred to as the Act) is stated as:

"An Act to provide certain conduct and practices in trade, to provide for the disclosure of consumer information relating to the supply of goods and services and to promote product safety and also to repeal the Consumer Information Act, 1968 and certain other enactments."

Hence, the Act aims to protect consumers and ethical traders from the practices of unethical traders who promote their goods or services with misleading and deceptive conduct (sections 9-12), false representation (sections 13-16), or unfair practices (sections 17-26). Requirements of consumer information (sections 27-28), product safety (sections 29-33), and the safety of services (sections 34-36) are also laid down. Enforcement and remedies (section 37-40) both civil and criminal are set out, as are miscellaneous provisions (sections 47-49).

In six parts the Act defines what is and is not acceptable in all of these categories.

When a trader is believed to have contravened the Act, the Police or Commerce Commission may bring a criminal prosecution against the said trader. The Commerce Commission or any other person may bring a civil proceedings against the trader.

Section nine is considered to be the key section of the Act (van Roy, 1991), because of the broad coverage that it provides, stating: "No person shall, in trade, engage in conduct that is misleading or deceptive or is likely to mislead or deceive." (Fair Trading Act, 1986, s9).

There are some exceptions in the legislation. For example, section 15 is called the 'publishers exception' (Burrows, 1990) as publishers and broadcasting bodies are not liable for misinformation in news items, features and so on. However, the publication of advertisements or any information referring to the supply of goods, services or land, is exempt from this exception. (Burrows, 1990).

An attempt was made to find out whether any cases had been tried under the Act with regards to eggs and their advertising. As far as was possible to ascertain, no such cases were recorded in the Manawatu or by the Commerce Commission in Wellington.

Under this Act there have been over one hundred and twenty cases taken to court by the Commerce Commission alone. Therefore, the Act is used by people to enforce fair trading procedures.

3.2.3 Self-Regulation

The advertising industry does not rely solely upon the Fair Trading Act 1986 and other corresponding legislation. In addition to the law, the industry has various codes of behaviour which are designed to complement, not replace, the laws of the land (ASA, no year, p3). There are two bodies that the advertising industry answers to, the Advertising Standards Authority (ASA), which also has a complaints board (ASCB), and the Broadcasting Standards Authority (BSA). The latter deals with television and radio, the former with all other medias.

Advertising agencies in New Zealand have a representative body called the Advertising Agencies Association of New Zealand (AAA). It has forty-nine member agencies, who account for ninety percent of the billings in New Zealand (NZYB, 1992).

3.2.3.1 The Advertising Standards Authority Inc

The ASA was formed in 1973 by the advertising industry, stemming from the AAA. It has ten members in total, nine from the print, telecommunications and entertainment media, the tenth being the AAA.

The ASA has three main objectives: to introduce Codes of Practice, to maintain and improve the standards that these Codes set, and to fund the Advertising Standards Complaints Board [ASCB]. (ASA, no year given).

The ASA has fourteen codes governing how advertisers may behave in the media. These range from a general code of ethics to the portrayal of people in advertisements to environmental claims. The codes are updated and brought in as the Authority sees a need through changes in society (for example the environmental code). These codes are implemented through the ASCB.

3.2.3.2 The Advertising Standards Complaints Board

The ASCB was established in March 1988 by the ASA, and has three functions. First, it adjudicates where breaches of the Codes are alleged to have occurred; second, it advises the "ASA on improvements to Codes and advertising standards", and finally, reports to the ASA on "any aspect of advertising which is causing concern". (ASA, no year).

The ASCB has eight members, four of which, including the chairperson, are public representatives with no affiliation to any media or advertising bodies. (ASA, no year given). Complaints must be lodged with the Board in writing with as much information about the offending advertisement as possible. (Print advertisements must be copied while television advertisements must have channel and approximate time recorded). If the chairperson decides the matter is suitable for the Board, the case is then determined, with all concerned parties contacted for their opinions and comments. The Board's

decision is communicated to these groups and to the media.

A complainant must abide by the Board's decision and forgoes any other legal recourse when the Board is used. If an advertisement is found to contravene a Code it is withdrawn from publication, as all "media members of the ASA have undertaken not to publish or broadcast an advertisement which has been held...to be in breach of the Codes of Practice". (ASA, no year given). It was felt by a person spoken with at the ASA that non-members also comply, because they do not want an unethical reputation in the marketplace.

In 1989 the total number of complaints across all media was twenty-four, rising to thirty-four in 1990. By 1991 there were one hundred and twenty complaints (this does not include duplicate complaints), rising even higher to two hundred and twenty-five complaints in 1992. (ASA, 1992). The most common complaint was misleading and deceptive information, followed by the advertising of alcohol. Most advertisements came from newspapers or television, although billboards, the Yellow pages, radio and magazines were also sources. (ASA, 1992). This shows that many different media are considered information vehicles by consumers.

With regards to eggs, there was one case reported in 1992 questioning the use of the title farm eggs in conjunction with battery eggs. The Board upheld the complaint, and this is laid out in appendix one.

3.3 Summary

Both regulatory methods, the Fair trading Act 1986 and the ASCB Codes of Practice are used by companies and consumers. It is difficult to say that one is used more than the other, as locating the exact number of cases prosecuted under the Act was not possible. However, both methods have been used and are being used to question some aspects of seller behaviour.

CHAPTER FOUR

METHODOLOGY

4.0 INTRODUCTION - METHOD OF RESEARCH

Two methods were used to obtain information on advertising expenditure on free-range and battery eggs in the Palmerston North area between 1986 and 1992. First, all commercial producers and wholesalers in the Manawatu who could have sold eggs to retailers or inhabitants of Palmerston North were interviewed in order to obtain their estimates of advertising expenditures. Second, direct estimates of advertising expenditure was made through a survey of the media, and through a survey of point of sales information. It was assumed each method would provide a check on the other.

The survey was limited to the Manawatu producers and wholesalers because while talking with members of the industry in this area, it became clear that they considered eggs were not imported into the region from outside localities, on any major scale. The Manawatu was considered that area defined by Telecom in their Manawatu telephone directory, and the region outlined by the NZPB as per their producer list (see below).

4.1 POPULATIONS²

4.1.1 The Producer Population

The first step in the research was to determine the size of the producer population. A telephone call was made to MAF in Auckland, who suggested that the Poultry Industry Association of New Zealand (Inc), also in Auckland, may be able to help. In turn, this body recommended that the Manawatu Primary Producers Cooperative (MPPC), located in Palmerston North, was the organisation to speak with. However,

² A population is defined as all people or businesses in the region defined who make up the aggregated elements under study. (Babbie, 1986).

this body was unable to help and the only available list was obtained from a researcher attached to the industry. The list comprised all producers in the Manawatu in 1988, and was compiled by the NZPB prior to their demise.

The list contained eighteen producers with addresses in the Manawatu. Of these, fifteen were traceable through the white and yellow pages of the Manawatu 1992 telephone directory.

From this list, the producers were called, and it was discovered that eleven of the fifteen traceable producers still produced eggs. Two producers raised and sold pullets (young chicks) and did not have any egg production. Another two producers had left the egg market.

One of the two producers who had left the industry had ended production in 1992, which from the point of view of this research made them a relevant population member. However, the producer was reluctant to participate which is a right that must be respected (Kidder, 1981).

Using this method a sampling frame of eleven was formed and all of these producers were contacted³. One producer, currently producing eggs, was reluctant to participate in the research because of the competitive nature of the industry. Another producer did not respond to messages and telephone calls during one week. The researcher decided that any more attempts to contact this producer were likely to be irritating, and ceased calling. These two producers are not included in the data obtained. The remaining nine producers were interviewed using a structured interview, the development, testing and administration of which is discussed in section 4.2.

4.1.2 The Wholesaler/Producer Cooperative Population

There is one commercial wholesaler and one producer cooperative in Palmerston North. The latter was referred to as an egg floor by every producer interviewed. Both of these businesses buy producers eggs and market them under their own brands.

³ The sampling frame is defined as all valid population data points that were traceable using any given method. (Kidder, 1981).

The information about the two businesses, had it been published, would have breached confidentiality since the aggregate figures could have been used by each competitor to deduce the other firm's sales. Both businesses were contacted however and asked about advertising, and both gave sufficient information to make a rough estimate of advertising expenditure they undertook in the period 1986-1992.

4.1.3 The Retailer Population

The retailer sampling frame in Palmerston North was drawn from the Yellow pages in the Manawatu 1992 telephone book. While it is recognised that this is not the ideal place to obtain a sampling frame, it was felt that was consistent with the way the producers sampling frame was obtained. Only outlets with 'PN' before their phone number (denoting Palmerston North), were contacted, since that is the city on which the research focuses. The retail outlets were broken down into four categories:

(i) Supermarkets and Grocers

There were fifteen businesses listed in the 1992 Manawatu telephone directory, and all were contacted to see if they were still operating. Only one number was found to be inoperable, and Telecom directory service said that the business was no longer listed with them. Therefore, the final sampling frame was fourteen. Eleven of these stores were willing for the researcher to call in, discuss eggs, and examine their display.

It was deemed necessary by the researcher to contact all members of this group since they were assumed to be the dominant retailers in Palmerston North.

There were some limitations to the data. For instance some stores being unable to give volume information. Moreover, volume and price information, especially with larger stores, was confidential. However, the medium sized stores were cooperative when it came to sharing that information.

(ii) Service Stations

It was assumed that service stations were convenience outlets, where people could pick up an item they found they needed, with or without purchasing petrol. It was assumed that few people would go there to do a full week's shopping. Therefore, a random

sample was selected.

The initial sampling frame was thirty-six, again drawn from the 1992 Manawatu telephone directory yellow pages. It was suspected that some of these outlets were not service stations. Therefore, the researcher visited all outlets that were not clearly related to an oil company. If an outlet sold only mechanical or appliance parts for vehicles, with no convenience shopping facilities and no petrol purchasing facilities, it was not included in the sample.

This check reduced the sampling frame to twenty-six. A sample of ten was chosen, approximately thirty-five percent of the sampling frame, all representing an oil company⁴. A table of random numbers and the selection method accompanying it (Babbie, 1986) was used to generate the sample, with the last two numbers of the five digit random number being chosen. If the number which resulted was over twenty-six, then this number was ignored, and the next number applicable to the sample size used.

In terms of service station location, the sample generated was spread around Palmerston North city, with no clustering around one street or suburb. The researcher rang each member of the sample to ascertain whether or not they had sold eggs in the period 1986-1992, and recorded whether or not they had. Those who did sell eggs were visited, after an appointment was made; and those who did not sell eggs, were asked why not.

(iii) Dairies

As with service stations, only a sample was chosen. The sampling frame for dairies was also taken from the 1992 Manawatu telephone directory yellow pages, and totalled thirty-six. However, two of these were also listed under Supermarkets and Grocers, so they were discounted, reducing the sampling frame to thirty-four.

A sample size of twelve was chosen, which was thirty-five percent of the population. This was selected in the same manner as the service stations (Babbie, 1986). In this case, the first two numbers of the five digit random number was used. If the number

⁴ A sample is defined as a proportion of the sampling frame chosen by a recognised sampling technique (Kidder, 1981).

was over thirty-four, it was discarded and the relevant next number taken.

As with the service station sample, the location of the dairies were well spread across the town, from the centre to the far edges of Palmerston North.

(iv) Butchers and Fruit-Shops

During the process of the research it was indicated that many producers sold to these retail outlets, so it was necessary to include a sample of them in the research. For consistency, the sampling frame of this population was drawn from the 1992 Manawatu telephone directory yellow pages. A random sample was drawn following the same method as the service stations and dairies. (Babbie, 1986). In this case, the middle two numbers of the randomly generated five digit number was used.

The sampling frame for both the butchers and fruit-shops was nine respectively. Five butchers were selected and contacted, but only four fruiterers were visited, because the fifth one was "too busy" to participate. (Again, this is the respondent's right. [Kidder, 1981]).

4.2 STRUCTURED INTERVIEW FORMATS

The research used two questionnaires as a basis for structured interviews, one for producers and one for retailers. Both questionnaires were administered, either in a face-to-face situation, or for some producers, over the telephone.

It was deemed necessary to use a formal questionnaire for two main reasons. Firstly, interview bias is reduced when there are set questions to follow (Kidder, 1981). Secondly, people are more likely to believe that research is genuine if there is a formal piece of paper accompanying the session. In the case of a telephone administration, people can tell that there is a flow to the questions.

In research, where person to person questionnaires are administered, two other benefits of questionnaires - anonymity and lack of time pressure - were absent (Kidder, 1981). However, the administration of a questionnaire by person, as opposed to mail, is felt to increase response rates (Kidder, 1981; Babbie, 1986). Kidder (1981) expects that response rates are higher, since people are able to talk instead of write. This is related to the fact that many people normally talk more fully (and faster) than they write. The interview also enables misunderstandings in questions to be explained and a longer questionnaire length to be used. (Kidder, 1981; Babbie, 1986).

Finally, it was possible for the researcher to establish some sort of rapport with the respondent (Kidder, 1981). It was found that most producers and retailers, whether it was over the telephone or a face-to-face interview, expanded upon the topic under review.

It was originally intended that all questionnaires would be conducted face to face. However, upon telephoning some producers to set up an interview, the researcher found some respondents who were not prepared to talk face-to-face but were willing to talk on the telephone. However, the information that these producers who participated by telephone gave, was still valid and of interest.

4.2.1 The Producer Questionnaire

The producer questionnaire (see appendix two) sought to examine the length of time on farm and the volumes and prices (both costs and retails) achieved since 1986. In

addition, enquiries were made about the types of eggs (battery or free-range) produced and the advertising levels associated with them.

The development of the questionnaire followed the method outlined by Kidder (1981). The first draft of the questionnaire was given to the two supervisors of the research. Their feedback enabled a second-draft to be designed, re-checked, and a third draft developed. (Kidder, 1981). This third draft was pre-tested on two of the producers who were still producing eggs (Kidder, 1981; Babbie, 1986). Due to the small number of producers in the sample frame the two pretest producers were included in the final survey. They were re-contacted and asked the new or revised questions two to three weeks after the original visit. This length of time was felt to reduce any likelihood of bias occurring in their responses.

As a result of the pre-test, there were four major changes to the questionnaire.

The pre-test showed that there was a likelihood that some battery producers may have raised free-range chickens before specific consumer demand for the product arose. Both pre-test producers mentioned that they had raised free-range chickens when they started out in business. Therefore, it was necessary to find out how many other producers had used this system, why, when they stopped, and for what reasons.

Second, producers were originally asked what quantities of each size of egg they had produced. However, during the pretest both producers pointed out that a hen lays all sizes during her lifecycle, and any estimation of volume per size would be impossible. Therefore the question was changed to ask the number of battery eggs produced and the number of free-range eggs produced.

Third, the pretest showed that while obtaining a figure for total output was possible, locating where it was sold was thought of by the producers in percentages, not dozens. This change was incorporated into the final question format.

Finally, in obtaining advertising expenditure for each year 1986-1992 it was originally hoped that the figures could be broken down into areas in which the money was spent. (For example, on newspapers). However, the pretest showed that this information was difficult to obtain, so a general figure and specific areas were adopted as the best

estimates possible. Information regarding the cost of packaging and branding for each year under discussion was not forthcoming at the pretest. The producers thought in terms of cost per tray, box or carton, not the overall expense. However, since this aspect of the business related to information and therefore advertising, the question was retained.

There were other minor changes as a result of the pretest. For example, when asked if they used a brand-name to sell their eggs, both pretest respondents replied no, they used their farm-name on boxes. The farm-name was therefore perceived as different to a brand-name, so the question was changed.

4.2.2 The Retailer Questionnaire

As with the producer questionnaire, the retailer questionnaire (see appendix three) was developed along the same method outlined by Kidder (1981). A first and second draft of the questionnaire was presented to the two supervisors and corrections made until a draft, the third, was settled on.

The third draft was pretested on two dairies and four members of the supermarket/grocer population. The butcher and fruiterer populations were relatively small, whilst the service station population was more likely to locate a non-seller. It was felt that because the first two categories also sell general groceries their customer traffic was likely to be heavier. Therefore, these outlets were used for the pretest. As with the producers, the pre-test businesses were re-visited to answer any changed questions, so they could be included in the final results. There was a lapse of two to three weeks in this time, which was estimated to be long enough for the respondents to have lost any bias in responding to the reworded questions.

There were two major changes to the questionnaire as a result of the pre-test. The first change related to the positions in the retail outlet. The pre-test originally gave only manager or owner, but it was necessary to add other categories to this list. Although managers or owners were telephoned to make the appointments, some stores had area specific managers, while others used a long-time staff member for the interview. As a

result the 'categories' of the people spoken to were broadened beyond 'manager' and 'owner' to include 'egg manager' and 'clerk'.

Second, when people were asked for their definition on a free-range egg, some of the pretest respondents were bemused. Therefore the researcher used a standard prompt asking: "If a customer came into your shop and asked if you sold free-range eggs, what do you think they mean?". This was the only clarification (Kidder, 1981) given to the retailers.

There were some minor changes, with wording and question order. For example, in the pre-test information on total volumes of battery and free-range eggs sold each year was collected separately from the supplier of the eggs. However, it was ascertained that the retailers found it easier to give the total volumes and their corresponding prices with the place the eggs were supplied (such as gate, wholesaler and so on).

4.3 DIRECT ESTIMATE OF ADVERTISING EXPENDITURE

4.3.1 Advertising and Information: Point of Sale and Packaging

From the literature in section 2.6, all aspects of a product presented to a consumer, be it a sign, a box, an advertisement, may be considered information for the consumer. (Telser, 1964; Ward et al, 1985; Davis et al, 1991; Kaldor, 1950; Ozga, 1960). Under the hypotheses in this study, we expect that free-range eggs will have some information which is verifiable, to differentiate it from a battery egg and therefore explain any resulting price difference.

Therefore, in this section, the methodology of the study of egg displays, egg signs, egg packaging, and egg location will be discussed. The area is deemed important by marketing literature, which emphasises visibility and appeal of displays, signs and packaging, as well as waist and eye height of products. (Bridges, 1987; Bridges, 1988; Bennoch, 1990).

The researcher originally went to a large supermarket in Palmerston North and asked permission to examine their egg display, packages, signs, and location. This research allowed certain questions (for example display units, store labelled signs) to be included in the retailer questionnaire design. In addition, the researcher developed an in-store form, package form and brand-sign form to use when visiting a retail outlet. These three forms are set out in appendix four.

4.3.1.1 Egg Displays

The store examined in the preliminary search used both a wooden 'hutch' and wire racks, all at room temperature. The hutch was eye catching, due to its colour, size and seemingly permanent location. Therefore, the retailer questionnaire included a question asking whether a store had a specific display unit or not. In case it did not, an information sheet (see appendix four) asked "In what are the eggs displayed", so the likes of shelves, wire cages and refrigerators could be noted. This separated out any specific display unit from a more 'convenience' approach of egg displaying.

In all cases the measurements of the unit were taken, height, width and breadth. This enabled the unit to be analysed with regards to consumers' ability to see the unit and

height at which eggs were displayed. In addition, the colour of the unit, again relating to the above two points, was noted.

4.3.1.2 Egg Signs

(a) In-store signs

The store that was originally examined had a number of signs displayed. These signs were different in colour, size, printing, writing and location in relation to the eggs. However, it could not be assumed that all egg displays that were to be examined would have signs with them. Therefore, the information sheet asked if a sign existed at all.

If a sign was in existence, the materials, its size (height and width), and colour were noted. In addition, it was noted whether the sign was printed or written or whether it was laminated. It was expected that larger stores would be more likely to have printed laminated signs than smaller stores.

The position of the sign was also important (Bridges, 1988). Whether the signs were above, below, beside or between the eggs was of interest, since depending on the height of the display, some signs are easier to see than others. With this in mind, the height from the floor to the top of the sign was recorded.

Finally, what was actually written on the sign was copied. Taking photographs would have been ideal, however this was not pursued for two reasons. Firstly, not all retailers would grant permission for photographs to be taken of their displays and signs; and secondly, there was no guarantee that the background of the signs would not identify some of more well-known local stores. Therefore, the signs were sketched by hand, and the size of the different words, word clusters and prices were measured.

(b) Producer Brand-name signs

The store used for the exploratory research also contained two brand-signs from a producer. Again, this necessitated a question on their provision and cost in the retailer questionnaire. As with in-store signs, the researcher realised that not all outlets may have a brand-sign for display. Therefore, the other side of the sign information sheet examined whether there was a brand-sign on display in the outlet. If so, questions

similar to the previous section were asked. Hence, the brand, the size, colour and information on the sign was recorded. This information was recorded so competitors' signs could be compared for wording, size, colours and so on.

The final section of the form allowed a space for additional information to be recorded, that is, the location of the eggs in relation to the entrance of the store, the other products by the eggs, and any information about the egg packet which was displayed under the relevant sign(s).

4.3.1.3 Egg Packaging

From casual observations made before the data collection began, it became apparent that there was a variety of packaged eggs. That is, producers, producer cooperatives, and wholesalers differentiated their products by packaging. All of these packets could be expected to give different information to consumers, and therefore they needed to be considered.

After the first in-store examination, a form was developed which provided a two dimensional view of the egg packet. The view related to the back of the lid, the middle to the top of the lid, and the final section to the front (or lip) of the lid. The egg packets were sketched on to these, while the brand, colour and dimensions of the box, and the size and colour of the eggs were written on a corresponding sheet (see appendix four).

As with the signs, the size of the words and pictures were recorded to enable a comparison between like brand packets and competitors packets, across different sizes of eggs. The interest here is in the information the packets give to the consumers.

The researcher decided to photograph at least one packet of each producers eggs. These photographs are presented in chapter five. A photograph will illustrate the colour of the packets more clearly than a sketch or description can, and will therefore aid the discussion.

4.3.2 Advertising in the Media 1986-1992

Prior to 1986, the NZPB was responsible for marketing eggs as a generic product. Once this function ended in 1988, producers were responsible for this function themselves. As a result it was necessary to examine Palmerston North advertising media which consumers had been exposed to in the period under investigation. Free mail 'flyers' were unable to be traced by the researcher as retail outlets did not have historical records of those used. However, only one retailer ever reported using this method to advertise eggs, so the lack of this estimate is not believed to influence the findings significantly.

Palmerston North has three local newspapers, The Manawatu Evening Standard, the Guardian and the Tribune. While two Wellington papers, The Evening Times and The Dominion, are also sold in the city, it was assumed that Manawatu producers would use Manawatu media and specifically, Palmerston North media, to attract Palmerston North people to their egg farms.

In addition to these local papers, in 1986 and 1988 the NZPB was still functioning as a generic marketeer for the whole of the New Zealand egg industry. Therefore national magazines needed to be sampled, since Palmerston North consumers would have had these media available to them.

It was decided that four national magazines would be examined for the years 1986-1988. These were: the *Listener*, the *New Zealand Woman's Weekly* (NZWW), *More* magazine, and the *North & South* magazine. These magazines were chosen because they represent both sexes and were not regionally based magazines. Due to the cessation of generic national marketing post-1988, these magazines were not examined after this period.

In order to select a sample over the years under review, a calendar for each year 1986-1992 had to be known. These were found in Whitaker's Almanack 1992 (1992, pp115-118), and were used to select systematic random samples (Babbie, 1986; Kidder, 1981). This type of sampling was recommended by a statistician who was consulted, since it would give a representative sample and continuity to the research while maintaining

randomisation. Therefore, an interval was chosen, a '*kth*' week of an uneven number, since an uneven number should produce a smoother frequency pattern than an even number.

4.3.2.1 The *Manawatu Evening Standard*

This newspaper had the largest publication rate of any of the media under examination. The newspaper is published six days a week, Monday to Saturday, and in the period which this research examines, could lose up to only four publication days a year (Christmas Day, Easter Friday, Anzac Day and New Year's Day). Some years even fewer days were lost because the public holiday fell on a Sunday, when the paper is never published.

Below is a table (table 4.1) showing the number of papers printed in each year, the number of papers sample for each year, and the percentage of the population that relates to. (In this case the population is the sampling frame because the newspaper is on microfiche in the Palmerston North Public library, Massey University Library and the Manawatu Evening Standard Library. If one place did not have a required copy on file, the researcher was able to try two other avenues).

Every eleventh week was selected for the sample, with two rotations through the calendars. In order to ascertain which days were the heaviest for advertising, the Manawatu Evening Standard office was called. The person spoken to said that Wednesday, Friday and Saturday were the heaviest days. Therefore, these days were weighted by adding approximately four extra days for each per year to the sample, still generated using the eleventh week.

Changing the interval was considered to cope with the weighting, but in the interests of randomisation and to therefore avoid double ups, the same interval was maintained. Not all years had an equal number of days of the week selected because occasionally the selected day fell on a public holiday. Again, in the interests of randomisation, this was allowed, and was not expected to bring a significant amount of bias into the sample.

TABLE 4.1
THE MANAWATU EVENING STANDARD

YEAR	TOT. PAPERS PUBLISHED	SAMPLE DRAWN (k = 11)	PERCENTAGE OF POPULATION
1986	309	68	22.0%
1987	310	73	23.5%
1988	311	71	22.8%
1989	310	71	22.9%
1990	305	69	22.6%
1991	309	69	22.0%
1992	309	66	21.3%
TOTAL	2 163	487	22.5%

4.3.2.2 *The Guardian*

This newspaper is free and delivered to homes all around Palmerston North. It is published every Wednesday for forty-eight weeks a year, but closes down for four weeks over Christmas - New Year. This newspaper is kept as hard-copy only, in the Palmerston North Public Library and the Guardian office. An interval of every seventh week was chosen for this newspaper. Table 4.2 over the page gives the population size and sample size.

4.3.2.3 *The Tribune*

This newspaper is published once a month by the Manawatu Evening Standard, and it is included in the Evening Standard as a separate item. It is published once a month for fifty weeks a year (that is, ten months of the year). It is not published in December and January. An interval of every nine weeks was chosen to sample the Tribune. Table 4.3 over the page gives its total number published and the sample taken.

TABLE 4.2
THE GUARDIAN

YEAR	TOT. PAPER PUBLISHED	SAMPLE DRAWN (k = 7)	PERCENTAGE OF POPULATION
1986	48	14	29.2%
1987	48	14	29.2%
1988	48	14	29.2%
1989	48	14	29.2%
1990	48	14	29.2%
1991	48	14	29.2%
1992	48	14	29.2%
TOTALS	48	14	29.2%

TABLE 4.3
THE TRIBUNE

YEAR	TOT. PAPERS PUBLISHED	SAMPLE DRAWN (k = 7)	PERCENTAGE OF THE POPULATION
1986	50	12	24%
1987	50	12	24%
1988	50	12	24%
1989	50	12	24%
1990	50	12	24%
1991	50	12	24%
1992	50	12	24%
TOTAL	350	84	24%

4.3.2.4 *More magazine, North & South magazine*

Both of these magazines are published monthly, twelve months a year. The More magazine was given an interval of every seventh week, while the North & South magazine had every fifth week chosen. Since the magazines are published monthly their sample size was high. However, to be consistent weeks were still used to generate the sample.

The population of each magazine is the same, twelve per year. However, in this case the sampling frame was less than the population because only the Palmerston North public Library carried the magazines and they did not have all in stock. In table 4.4 the sampling frame is noted in place of the population.

TABLE 4.4

MORE AND NORTH & SOUTH MAGAZINES

YEAR	MORE SAMPLING FRAME	MORE SAMPLE (k=7)	MORE % OF SAMPLING FRAME	NTH & STH SMPLG FRAME	NTH & STH SAMPLE (k=5)	NTH & STH % SAMPLG FRAME
1986	10	5	50%	5	5	100%
1987	9	5	55.5%	7	7	100%
1988	11	6	54.5%	11	9	82%
TOTAL	30	16	53.3%	23	21	94%

4.3.2.5 *The Listener and the New Zealand Woman's Weekly (NZWW)*

Both of these magazines are weekly publications. The NZWW does not miss any weeks due to public holidays, while the Listener puts out a double issue covering Christmas and New Year. Therefore, the population for the Listener is fifty-one magazines a year (since only the television information is doubled, not the advertisements or column articles); whilst the population of the NZWW is fifty-two. Again, the population is not the sampling frame due to missing copies, and hence the sampling frame and sample located is recorded below in table 4.5.

An interval of every ninth week was chosen for the Listener and every fifth week for the NZWW. The latter is frequently mentioned by the NZPB throughout in its annual reports of the 1980s when referring to national egg campaigns. The NZWW was also given emphasis because the marketing programme of the NZPB frequently targets women whom the Board assumed prepared and did most of the household cooking. (See for example, NZPB, 1981/2; 1984/5).

TABLE 4.5

**THE LISTENER AND NEW ZEALAND
WOMAN'S WEEKLY MAGAZINES**

YEAR	LISTNR SAMPLG FRAME	LISTNR SAMPLE (k=9)	LISTNR % SMPLG FRAME	NZWW SAMPLG FRAME	NZWW SAMPLE (k=5)	NZWW % SAMPLG FRAME
1986	47	9	19%	0	0	0
1987	49	10	20%	50	9	18%
1988	48	10	20%	49	9	18%
TOTAL	144	29	20%	99	18	18%

4.3.3 Radio

Six radio stations were in Palmerston North during 1986-1992. There were the National and Concert programmes, neither of which run advertisements, and four other stations: 2QQ 90.6FM; 92.2XSFM; 2ZA; Classic Hits 98FM. The marketing managers of these stations were contacted to request any information they may have on the advertising of eggs during the period under study. The results from this are in section 5.4.

4.4 Consumer Perceptions of Differences Between Battery and Free-Range Eggs.

The discussion with the retailers showed that there are consumers who prefer to buy free-range eggs over battery eggs. Some retailers attempted to draw the researcher into a discussion on the difference in taste and colour of the two different egg types (free-range or battery), from the stand point that they could taste and see a difference.

The literature in this field discusses how important consumers perceptions and behavioural patterns are in relation to what they believe they can see and taste in food. (Thomson, 1988; Sheen and Drayton, 1988). Trained panel testers and untrained panel testers are used in some experiments (O'Mahony, 1986) to compare consumer views of food. In essence, what a consumer perceives when trying a food in their own home (an uncontrolled environment) may not necessarily be what they will taste or see when they taste and see the same food in a controlled environment. (See for example: Piggott, 1988; Jellinek, 1985; O'Mahony, 1986).

For these reasons, the assumption that consumers can not, by sight nor taste, necessarily distinguish a free-range egg from a battery egg is maintained throughout the dissertation.

CHAPTER FIVE

RESULTS

5.0 INTRODUCTION

The basic objective of the research was to estimate the ratio of advertising expenditure to sales for free-range and battery eggs in Palmerston North, in order to see whether the ratios were consistent with the hypotheses generated by the literature. Again it must be emphasised that the hypotheses could not be tested for statistical significance since the data related to a single product in a single area. The research was conducted in Palmerston North in 1992-1993, examining the period 1986-1992.

Two methods were used to estimate the ratio. First, expenditures by producers, retailers and wholesalers on advertising were estimated directly by surveying the various parties. Second, advertising media were surveyed to check actual expenditure.

There were discrepancies between the two estimates, and these are discussed in section 5.3.8, where possible explanations are presented. The two estimates, their calculation and their relationship to the hypotheses are discussed below.

It should be noted that in estimating advertising expenditure, a definition had to be given on what constituted advertising, since advertising material may take several forms and be presented in several places. For instance, information may be provided by drawing the consumers attention to a brand name or to the location of a product in a sign, or to the location of the sign itself. Advertising may be presented aurally (for example on the radio), or visually (for example on posters or packaging). For the purposes of this research, advertising was defined as the presentation of visual or aural information about brands or products:

- (i) at the point of sale
- (ii) in the media

For reasons referred to below (section 5.3.1) expenditure on information via packaging was excluded from estimates of advertising expenditure, and was regarded as part of general production costs.

Producers can sell eggs at their gate, direct to a retailer, to a wholesaler or to a producer cooperative (commonly defined as an egg floor by the producers interviewed). All four methods of sale are used in the Manawatu, although not by every producer, and all four avenues can, in theory, provide a venue for advertising the producer's eggs. However, in practice, the producers confine their advertising to outlets where they are in control of the sales. (The farm gate and direct to retailers).

5.1 PRODUCERS, RETAILERS, WHOLESALERS AND PRODUCER COOPERATIVES: PRODUCTION AND SALES INFORMATION, AND DEFINITIONS OF FREE-RANGE EGGS

5.1.1 Producers

In 1988 the NZPB listed eighteen producers in the Manawatu area. By 1992 only ten from this list could be traced, and a new entrant was also found, bringing the total number of traceable producers to eleven. Therefore, between 1988 and 1992, eight farmers had left the industry. Of the eleven traceable producers, nine agreed to talk with the researcher. Therefore, all of the information on total expenditure which is discussed below, relates **only** to these nine producers for the period 1986-1992.

Eight of the nine producers interviewed had produced prior to 1986. For the nine farmers, the median period of time on the poultry farm was twenty-five years, and the maximum fifty years. A new entrant in 1990 meant that the shortest time on a farm was three years (although the new entrant had had prior experience on a poultry farm). Therefore, all producers had experience, although minimal in one case, of farming under the NZPB.

The flock sizes kept by farmers 1986-1992 are illustrated by table 5.1 on the following page. As can be seen, the median, although changing after 1989, fell by only two hundred birds, while the maximum and minimum value changed dramatically. The

change was due to a new entrant in the market place and to established producers increasing their flock sizes. Three producers of free-range eggs were found, two from 1990 and three from 1991.

TABLE 5.1
FLOCK SIZES FOR INTERVIEWED PRODUCERS
1986-1992

YEAR	MAX FLOCK SIZE	MIN FLOCK SIZE	MEDIA N FLOCK SIZE	TOTAL N BATTERY HENS*	TOTAL N FREE-RANGE HENS**	TOTAL FLOCK SIZES
1986	24,000	5,700	12,200	117 100		117 100
1987	24,000	5,700	12,200	117 100		117 100
1988	24,000	5,700	12,200	117 100		117 100
1989	24,000	5,700	12,200	121 100		121 100
1990	24,000	150	12,000	121 100	1 950	123 050
1991	24,000	60	12,000	121 100	3 660	124 760
1992	45,000	80	12,000	142 100	3 680	145 780

* For the producers surveyed, eight produced battery eggs 1986-1992

** There were two free-range producers in 1990, and three in 1992. Only one of these produced solely free-range eggs from 1990 onwards.

5.1.1.1 Production

The output for all battery farmers was ascertained by the research. While no figures on free-range egg production were given by the three free-range producers, an estimate was made by multiplying free-range flock numbers by a modified output per hen, based on battery hen production. Most battery producers estimated that each hen laid twenty-two dozen eggs a year. Since free-range hens roam and may lay their eggs where a producer can not find them, and since they are more accessible to predators, and subject to bad weather and disease, the figure of twenty-two dozen was modified to seventeen dozen every ten months. (Ten months allows for the natural moult that battery eggs do not have because of their controlled environment.) (See table 5.2).

TABLE 5.2

TOTAL EGG OUTPUT IN DOZENS FOR
BATTERY AND FREE-RANGE PRODUCERS
SURVEYED IN THE MANAWATU

YEAR	PRODUCER NUMBERS BATT F-R	BATTERY (dozen)	FREE- RANGE (dozen)	TOTAL (dozen)
1986	8 0	2 462 916	0	2 462 916
1987	8 0	2 462 916	0	2 462 916
1988	8 0	2 462 916	0	2 462 916
1989	8 0	2 554 166	0	2 554 166
1990	9 2	2 554 166	27 625	2 581 791
1991	9 3	2 554 166	51 850	2 606 016
1992	9 3	3 033 228	52 133	3 085 361

5.1.1.2 Sales Outlets

It was necessary to locate where the producers sold their eggs, and therefore the area in which advertising might have taken place.

On the questionnaire, respondents were asked for percentages of their output sold through the four main channels, and was then converted into corresponding volume figures.

The change in the battery egg market in 1992, shown in table 5.3 below, was brought about by one producer changing to sell his output solely to retailers. Across all the producers twenty percent was the median percent of all battery eggs sold at the gate. In the period 1986-1991, forty-percent was the median percent sold to retailers. In 1992 this changed to fifty-five percent, as one producer sold solely to retailers. This accounts for the large increase shown in the volume figures below. The median percentages used in the following tables are not meant to sum to one hundred percent. They have been presented solely as a guide to show where the eggs are likely to be sold.

One producer did not give the percentages of sales to the various outlets, but did

specify they were sold to retailers and at the gate. The gate median percent was estimated for his gate sales and the balance was apportioned to retail sales. This is believed to be a fair estimate based on the quantities produced and additional comments the producer made.

Table 5.4 gives the volumes of free-range eggs sold to retailers or at the gate. The three producers only sold their eggs through these two avenues.

The range of retailers varied. Bookshops, butchers, dairies, service stations, supermarkets and bakeries were mentioned, with several respondents commenting that they sold their eggs wherever and to whomever they could.

TABLE 5.3

AMOUNT OF BATTERY EGGS SOLD AT THE GATE
OR DIRECT TO RETAILERS BY SURVEYED PRODUCERS
IN THE MANAWATU 1986-1992

YEAR	GATE: TOTAL VOL SOLD (dozen)	RETAIL: TOTAL VOL SOLD (dozen)
1986	266 583	599 833
1987	266 583	599 833
1988	266 583	599 833
1989	284 833	672 833
1990	284 833	672 833
1991	284 833	672 833
1992	355 646	1 276 082

TABLE 5.4

AMOUNT OF FREE-RANGE EGGS SOLD AT THE GATE
OR DIRECT TO RETAILERS BY SURVEYED PRODUCERS
IN THE MANAWATU 1986-1992

YEAR	GATE VOLUME (dozen)	RETAILER VOLUME (dozen)
1990	10 306	17 319
1991	10 242	41 608
1992	10 256	41 877

The free-range egg producers in table 5.4 had different selling patterns. One producer sold all his eggs to a retailer, another sold sixty percent to retailers and forty percent at the gate, and the other sold five percent at the gate and ninety-five percent to retailers.

Battery farmers also sold eggs through wholesalers and producer cooperatives (defined as egg floors by every producer interviewed). The use of a wholesaler was not popular, and occurred in only two cases where the wholesaler was a retailer who sold the eggs on to other retailers. One producer sold ten percent to a wholesaler and the other seventy percent. A summary of the sales to wholesalers and producer cooperatives by the eight battery producers is given in table 5.5.

The median percent sold to producers cooperatives by the surveyed producers was sixty-five percent up until 1991. In 1992 the figure changed to seventy-percent, due to one producer leaving this avenue of selling.

TABLE 5.5

AMOUNT OF BATTERY EGGS SOLD TO WHOLESALERS
OR PRODUCER COOPERATIVES BY SURVEYED PRODUCERS
IN THE MANAWATU 1986-1992

YEAR	WHOLESALER: TOTAL VOL SOLD (dozen)	PRODUCER COOP: TOTAL VOL SOLD (dozen)
1986	187 567	1 408 933
1987	187 567	1 408 933
1988	187 567	1 408 933
1989	187 567	1 408 933
1990	187 567	1 408 933
1991	187 567	1 408 933
1992	12 567	1 388 933

5.1.1.3 Free-range Eggs: Production Methods and Definitions

(a) Free Range Egg Production

Of the nine producers spoken to, four had produced free-range eggs in the past, prior to any consumer movement developing for these eggs. Of these four, two used this method to produce eggs in the 1960s, one could not give any dates, and another reported that he had raised pullets (young chickens) on a free-range basis for a short time.

Two of the producers reported they ended free-range production when battery cages were invented and introduced to New Zealand (in the 1960s). The other producer gave up free-range farming because he found it uneconomic in terms of labour costs and unhygienic, with high mortality rates in the hens.

Until 1990, eight of the surveyed producers produced only battery eggs. In 1990 there was a new market entrant (the ninth surveyed producer) who produced solely free-range eggs. In the same year a battery producer diversified production in to free-range eggs, joined by another battery producer in 1991. All of these were on a small scale, from under one hundred hens to 1,800 hens by the end of 1992.

(b) Current Free-Range Egg Producers Production Systems

The three current producers of free-range eggs used different production systems to battery farmers. They were asked to talk about these systems in relation to three areas: the physical production systems, costs and 'other' areas.

Production systems for free-range eggs required more space than battery systems. Sleeping houses and nest boxes were needed, and in terms of hygiene, the boxes had to be off the ground. (In one case they were moveable so the manure could be bagged and cleaned away.)

The costs were higher with respect to two areas. First, free-range egg production was more labour intensive than battery production, in terms of handling the birds and the eggs. This comment was made by three producers, with one specifying that free-range egg production increased the amount of labour required per hen. The second increased cost came through feed requirements. The hens fed outside on grubs and grass, but with movement their energy requirements were higher than battery hens and additional feed had to be provided.

Other factors were mentioned, such as the high mortality rate due to predators (cats, rats, hawks) which could get to the hens running outside. All three producers said that free-range hens were prone to disease since hens could pick in their own and other animals excrement.

This information was confirmed by battery producers, four of whom had raised free-range hens. They viewed battery production as healthier than free-range egg production because the birds were off the ground, in a controlled environment, and therefore needed less drugs (this is discussed further below).

The three producers of free-range eggs had different reasons for the decision to go into production. One was presented with the opportunity of purchasing capital equipment at a reasonable price, strengthened by a personal belief that battery egg farming is cruel. Another responded that consumer and wholesaler demand made them move into production, while the other producer was responding to competition.

(c) Grain-Fed Eggs

All of the surveyed producers were also asked if they raised grain-fed eggs, and only one responded in the affirmative. Two producers were of the opinion that the term 'grain-fed' eggs was misleading because all hens were fed grain; solely grain-fed birds received either lucerne pellets or soya bean meal, instead of meat and bone meal. While other producers did not comment on this specifically, another two also noted in passing that the concept was misleading.

However, if the birds do receive only grain feed, then the statement that they are 'grain-fed' must be considered true. It may be that the producers were disputing the claims attached to grain-fed birds eggs (for example, low cholesterol), which like free-range eggs, require the consumer to pick the difference in taste (King, 1992).

(d) Producer Definitions of Free-Range Egg Production

All producers recognised that there was a difference between free-range and battery egg production, and they were asked to define this in their own words. The answers consistently fell into three areas.

First, three of the nine producers believed that free-range egg production meant that "*The chooks should not be in battery cages*".

Second, five of the nine producers said that the hens should be able to "*run outside*", with one of the producers stipulating a period of more than eight hours, and another adding that no time frame should exist.

Finally, four of the nine producers believed that the hens should have "*access to fresh grass*", again with the two time stipulations recorded in the second response.

There were additional comments with this question. Two producers stated that the area needed defining, citing instances where having the door of the hen house open for half an hour may enable a producer to call their eggs free-range. Another two commented in stronger terms. After being read the question the first words spoken were: "A lot of rot - there's no such thing as a real free-range egg. A lot of cheating occurs, you know."; and "A lot of nonsense, there's no such thing."

These comments were followed by answers fitting the categories above, although both

producers explained further what they meant. In essence, they were suspicious of free-range egg production, although they saw a market for the type of egg, because the ability to misinform consumers was so great. They cited the use of antibiotics and the living conditions of the animals as cases in point.

All three free-range producers openly stated that they used antibiotics to cure diseases such as red-mites. Only one packet of eggs, imported from Auckland, declared itself drug-free (see illustration nine). However, a free-range egg is not necessarily an antibiotic free egg. Free-range only denotes a way of living (free to range the pasture), a point MAF, Auckland, agreed with when they were asked to comment.

One producer who failed to give a definition stated that free-range egg production was: "Uneconomic. At least in the short-term. It's only possible with small numbers". It is likely that 'short-term' should have been 'long-term', but that was the comment as it was spoken.

Therefore, there was a consensus among the producers that a free-range production unit should enable the chickens to go outside with access to plenty of fresh grass, and that they should at no stage be locked in battery cages.

5.1.2 Wholesalers/Producers Cooperatives

There are two major commercial actors in these avenues of egg selling. For this reason no aggregation of information was possible, and the people concerned were asked informal questions. Due to the competitive nature of the marketplace, neither participant was willing to release volume information. All advertising information obtained from these two businesses was calculated as an average.

5.1.3 Retailers

This discussion is broken into the four categories of retail outlets that were explored.

5.1.3.1 Supermarkets/Grocers

(a) Background

Four store managers, two egg managers and five store owners were spoken with in the eleven outlets. The maximum time people had owned or worked in an outlet was eight years, and the minimum one year and seven months. The median time spent in the store was four years. This means that at least half of the respondents had been involved in the egg industry since 1988.

(b) Definitions of free-range eggs

The respondents were asked to define free-range eggs so this could be related to what eggs they said they sold and any in-store information. There were ten responses to this question.

Four retailers said that a free-range egg came from a chicken which was outside in paddock, usually all day *and* was not in a battery cage. Three of these retailers sold eggs as free-range. Two retailers, who did not sell free-range eggs, did not know what they would define as a free-range egg. Two retailers, both of whom sold eggs as free-range, defined these as "brown eggs" and "loose eggs" respectively. One retailer called an egg off a non-poultry farm free-range, while the last retailer said it was an egg that the chicken could lay anywhere.

The ten retailers in this category had no main definition that could be applied across them all. They tended to be unsure exactly what was meant by the term 'free-range'.

(c) Supply of Eggs

The surveyed supermarkets and grocery stores favoured buying their eggs from the producer cooperative, although the other avenues were also used. Due to confidentiality it was difficult to obtain the volumes of free-range and battery eggs these retailers purchased. One of the eleven respondents did not say where their eggs were purchased so table 5.6 (below) is for ten supermarkets and grocers only. The table totals to eleven however, because one outlet used both a producer cooperative and a wholesaler.

TABLE 5.6
WHERE SURVEYED SUPERMARKETS/GROCERS
IN PALMERSTON NORTH
BOUGHT THEIR EGGS 1986-1992

YEAR	GATE*	PRODUCER DELIVER**	WHOLESALER	PRODUCER COOP.***
1986	1	3	2	5
1987	1	3	2	5
1988	1	3	2	5
1989	1	3	2	5
1990	1	3	2	5
1991	1	3	2	5
1992	1	3	2	5

* Classified as free-range eggs by the retailer.

** Three retailers received eggs they classified as free-range this way.

*** Two retailers received eggs they classified as free-range this way.

Clearly, the most popular method is via a producer cooperative, followed by producer deliveries. Buying from a wholesaler or at the gate is not popular. These answers corresponded to the brands and types of eggs found in these outlets, which were

predominately those of the producer cooperative. (Only three brands were found: Little Red Hen, Turks Poultry Farm and Frenz).

Six of the people interviewed stated that they sold free-range eggs. Two did not give the starting date of sales, but of the four who did, they began in either 1991 or 1992. Three of these outlets sold loose 'free-range' eggs, but the other three sold branded free-range eggs. These were brands from Little Red Hen and Frenz (an Auckland brand). This latter brand are the only eggs found to have been brought in to the area by a retailer. In every case, retailers stocked free-range eggs due to consumer demand.

5.1.3.2 Dairies

(a) Background

Twelve dairies were randomly sampled out of a sampling frame of thirty-four. The person interviewed in every outlet was the owner-operator of the shop. The longest period any owner had been in a shop was thirty-two years, and the minimum period was six months. The median period of time owners had spent in the shop was three and a half years, which indicates that many of the people were not in the shop at the time of deregulation, although the majority of the owners had previously run other stores.

(b) Definitions of free-range eggs

As with the producers, it was necessary to obtain an idea of how the retailers defined a free-range egg before they were asked if they stocked them. Three of the retailers defined a free-range egg as one which was not laid in a battery cage. Another three believed that the chicken should be running around outside, and laying their eggs there too. Two producers said they did not know, with another looking blankly at the researcher and saying "Just free-range".

The three remaining retailers had different opinions. One said a free-range egg was "A single egg", another that it was an egg which was "nice and fresh", and the last retailer that it was a "fresh farm egg".

The largest response in this group is to give a non-battery or outdoors definition, but no response is large enough to be considered dominant. Therefore, dairy retailers appear to be confused about the definition of a free-range egg.

(c) Supply of Eggs

Three retailers purchased their eggs from the gate, one since 1989, and two since 1992. Only one of these retailers used an outside and non-battery definition for eggs; the other two believed a fresh egg was a free-range egg. The other retailers had the farmer deliver the eggs, although one who bought from the gate in 1992 had had them delivered 1988-91. (See table 5.7).

TABLE 5.7

WHERE SURVEYED DAIRIES IN PALMERSTON NORTH
BOUGHT THEIR EGGS 1986-1992

YEAR	GATE*	PRODUCER DELIVERED**	PRODUCER COOP.
1986		1	3
1987		1	3
1988		2	3
1989	1	4	4
1990	1	5	3
1991	1	5	3
1992	3	6	3

* Two retailers stated that their eggs were free-range

** Four producers stated that they sold free-range eggs, with three of these also selling battery eggs

NB: This table will not total to the number of producers because producers changed suppliers and entered the market at different times. This table gives a picture of the changing pattern of retailer purchasing 1986-1992.

Eight retailers sold battery eggs, which in all but two cases were packaged and branded or labelled. Five brands were located: Little Red Hen, Turks Poultry Farm, Thurston's Poultry Farm, Golden Lay, and Hessels Poultry Farm. During the period under investigation, four dairy owners ceased buying from the producer's cooperative. Three moved to buy direct from the farmer and one bought from the gate. This resulted in different brands being stocked. Two of the 'battery' retailers stocked loose eggs, but

neither considered these free-range eggs.

Six producers answered that they did sell free-range eggs. Only two retailers sold eggs from 1988/9 as free-range, the other four sold them from 1990 or 1992. In these times, four sold loose eggs, but the other two did not specify and had stopped selling them in 1992.

The reasons for retailers stocking 'free-range' eggs (or as they believe them to be) also varied. One retailer had no idea why they were bought, while another said that they had always sold them. Three retailers said that they sold them because they and their customers liked them. One retailer, who tried them in 1992 but stopped stocking them, originally brought them in because someone asked for them. This retailer thought they may try them again in winter, although the significance of this season was not elaborated on.

5.1.3.3 Service Stations

(a) Background

Ten stations were contacted, but six had no record of ever selling eggs. When questioned as to why not, three said that they sold petrol, mechanical services, confectionery and cigarettes but did not see that supplying groceries was a service they should provide. One stated that there were shops near them so there was no point trying to compete.

In the other stations a manager of the outlet was interviewed in two cases, the owner in one and a cashier in one. Three of these people had at least two years experience in the outlet, the fourth person had been in their position for eight months.

(b) Definition of a Free-Range Egg

Three of the people spoken to defined free-range eggs as loose eggs that were bought in a tray or a paper bag, while the other person said it meant having a free range of eggs. Service station respondents were therefore unsure of what a free-range egg was.

No outlet sold free-range eggs, either branded or loose. All stores had packaged number six or seven eggs under the Little Red Hen brand.

(c) Supply of Eggs

In every case the eggs were delivered by the producer cooperative.

5.1.3.4 Butchers

(a) Background

Five butchers were contacted, although only four sold eggs. The non-seller was in an area where other shops sold eggs and saw no benefit from carrying them. Two of the butchers interviewed were shop managers, and the other two were owners. The maximum length of time a retailer had spent in their shop was nine years, and the minimum four months, which gave this respondent one month in the retail outlet in 1992. The median time in an outlet was six years.

(b) Definition of free-range

All four butchers defined a free-range egg as one which was not kept in a battery cage, with two adding that the chickens should be free to go outside when they wished.

(c) Supply of Eggs

Three of the butchers had their eggs delivered by a wholesaler, while the other bought them at the farm gate. Two of the butchers sold free-range eggs in the period under investigation, and in both instances these were loose eggs.

One of the respondents (who bought from a wholesaler) mixed the free-range and battery eggs together in the container on the counter, but if asked, assured his customers that the eggs were free-range. When asked why he carried free-range eggs, he replied "Pass", adding that some farmers came in with them so he bought them. Therefore this butcher bought his free-range and battery eggs separately. Neither butcher had a sign up to differentiate the eggs. One who had carried free-range eggs no longer did so, as he found that turnover was too slow.

All butchers sold battery eggs, although in only one case was a brand carried.

5.1.3.5 Fruiterers

(a) Background

Three of the fruiterers interviewed were the owners of the outlets, and one was a manager. The minimum time a person had owned or managed an outlet was eight months, and the maximum two and a half years. The median time in the shop was nineteen months.

(b) Definition of Free-range

All of the retailers said that a free-range egg required the chicken to be loose, free to run around a paddock and not be enclosed in sheds or cages.

(c) Supply of Eggs

Three fruiterers had their eggs delivered by the producer, and one bought eggs at the gate. Two fruiterers sold free-range eggs, one since 1992, and the other occasionally. The latter did so to help out a friend, while the other did so to cater for consumer demand and because the producer delivered the eggs. However, as with the butcher above, both battery and free-range eggs were sold together. All eggs, whether battery or free-range, were loose in trays and sometimes pre-bagged.

5.2 PRODUCER, WHOLESALER, PRODUCER COOPERATIVE AND RETAILER ESTIMATES OF ADVERTISING EXPENDITURE (EXCLUDING ADVERTISING ON PACKAGING)

5.2.1 Producers

In the years 1986-1988 and 1990-1991, only three of the surveyed producers advertised. In 1989 that number rose to four, and in 1992 it was five. All of these producers advertised to increase gate sales; none gave specific advertising material (aside from packaging, which will be discussed separately below) to retailers. Two of the producers supplied free-range eggs, but did not at any stage emphasise this in their advertising; all eggs were advertised generically. All producers who advertised said that they did so to inform consumers of the fact that they sold eggs at the farm gate.

Table 5.8 shows the number of surveyed producers who said they advertised, and their total expenditure on advertising other than packaging for each year under discussion. Four of the producers used newspapers, either free, or the local papers. Only one used leaflets ("junk mail"), and local magazines (which were not specified). Five set up gate signs, although these were generally a one off cost and only renewed if they became worn. Three also advertised in the yellow pages, while only one advertised on the radio. Expenditure on packaging is omitted since it proved almost impossible to get reliable estimates of costs (see section 5.3.1).

The information presented enables advertising sales ratios to be calculated. (See tables 5.9 and 5.10).

TABLE 5.8

TOTAL ADVERTISING EXPENDITURE BY
SURVEYED PRODUCERS 1986-1992

YEAR	NUMBER OF PRODUCERS	NUMBER ADVERTISING	PRODUCER EXPENDITURE
1986	8	3	\$ 4 140
1987	8	3	\$ 4 140
1988	8	3	\$ 4 140
1989	8	4	\$ 4 340
1990	9	3	\$ 4 140
1991	9	3	\$ 4 840
1992	9	5	\$10 840

TABLE 5.9

ADVERTISING/SALES RATIOS FOR ALL EGGS
(FREE-RANGE AND BATTERY) FOR THE
SURVEYED PRODUCERS 1986-1992

YEAR	ADVERTISING EXPENDITURE *	VOL PRODUCED (dozen)	PRICE PER DOZEN (excl.GST)**	RATIO AD/SALES (VolxPrice) %
1986	\$ 4 140	2 462 916	\$ 2.00	0.084
1987	\$ 4 140	2 462 916	\$ 2.07	0.081
1988	\$ 4 140	2 462 916	\$ 2.17	0.077
1989	\$ 4 340	2 554 166	\$ 2.10	0.081
1990	\$ 4 140	2 581 791	\$ 2.80***	0.057
1991	\$ 4 840	2 606 016	\$ 2.70***	0.069
1992	\$10 840	3 085 361	\$ 2.65***	0.13

* This does not include the NZPB advertising estimate which is relevant to the Manawatu (see page 86). The figure only states what the producers said they spent.

** Based on information in NZPB annual reports, and producer and retailer interviews.

*** Prices are higher because of free-range eggs in the marketplace

TABLE 5.10
 ADVERTISING SALES RATIOS FOR
 BATTERY EGGS 1986-1992
 (ALL SURVEYED PRODUCERS)

YEAR	ADVERTISING EXPENDTIURE *	VOL PRODUCED (dozen)	PRICE PER DOZEN (excl.GST)**	RATIO AD/SALES (VolxPrice) %
1986	\$ 4 140	2 462 916	\$ 2.00	0.084
1987	\$ 4 140	2 462 916	\$ 2.07	0.081
1988	\$ 4 140	2 462 916	\$ 2.17	0.077
1989	\$ 4 340	2 554 166	\$ 2.10	0.081
1990	\$ 4 140	2 554 166	\$ 2.00	0.081
1991	\$ 4 840	2 554 166	\$ 1.80	0.10
1992	\$10 840	3 033 228	\$ 1.70	0.21

* This does not include the NZPB advertising estimate which is relevant to the Manawatu (see page 86). The figure only states what the producers said they spent.

** Based on information in NZPB annual reports, and producer and retailer interviews.

The advertising-sales ratios in the tables above are low. From table 5.9, for all eggs and all surveyed producers, no more than 0.084 cents per dollar of sales was spent on advertising. With the introduction of free-range eggs into the marketplace that ratio fell to 0.057 cents per dollar of sales, although it rose in 1992 to 0.13 cents per dollar. Removing the free-range egg sales and examining only battery sales (table 5.10) a maximum of 0.21 cents per dollar of egg sales was spent on advertising in 1992, and was as low as 0.077 cents in 1988.

It was possible to run a Mann-Whitney U test (O'Mahony, 1986) to investigate whether flock size was related to advertising. Since it was not possible to assume farm size had a direct effect on advertising expenditure, a two-tailed t-test was used (O'Mahony, 1986).

This test showed that for 1986-1988 and 1990-1992, the size of the farm did not influence the likelihood of advertising at the five percent level. All t-test scores obtained were 0.1429, 0.3810 or 0.7302 for these years. Only for 1989 was it possible to say that there was an influence, with $p=0.0286$ obtained. This year had eight of the producers interviewed farming, of whom four advertised. Advertising expenditure in 1989 was only \$200 greater than for the years 1986-1988 and 1990, but there was an increase in volume of 26 000 dozen eggs. Therefore the additional flock size the new advertiser brought into the test made a significant difference. Overall however, flock size did not influence the likelihood of producers advertising their eggs.

During 1986-1988 the NZPB was also advertising nationally. As they represent the producers their expenditure should also be included, although only a rough estimate for any specific region is possible. The NZPB advertised throughout New Zealand on television, radios, in the Listener and the New Zealand Woman's Weekly. The local radio stations have no record of any advertising occurring here (see section 4.3.3), and neither do the two magazines for 1986.

However, on the Listener, the NZPB spent \$30,300 in 1987, and over \$33,040 in 1988. The NZPB included a recipe insert in 1988 which increased the cost but no estimate was available from the Listener. The NZWW estimated over \$25,000 dollars spent for both 1987 and 1988 respectively. Since the industry was spending a large amount of money on generically advertising eggs in those three year this may account in part for the low level of advertising that occurred in these years.

To estimate how much money of this national budget could be apportioned to the Manawatu area, the output (in dozens) of the surveyed Manawatu producers was divided by the National Output (in dozens) as recorded by the NZPB. This ratio was 2 462 916 divided by 44 821 000, which equals a fraction of 5.5%. Since the NZPB uses the 1986 figure for its 1986/87 and 1987/88 annual reports, this figure has been used for all three years. With magazine, television and radio advertising, the NZPB spent an estimated \$70 000 to \$80 000 in 1986/7 and 1987/8 on various media campaigns. Therefore, multiplying \$75 000 (a halfway point between the two figures above), by 5.5% an estimated figure of \$4 125 of the NZPB advertising budget is apportioned to the Manawatu area in the years 1986-1988.

The advertising/sales ratios for 1986-1988 calculated in tables 5.9 and 5.10 do not include this estimated figure. However, once \$4 125 is added to the producers' reported advertising figure of \$4 140, the total advertising by producers for each year 1986-1988 becomes \$8 265. Maintaining the same sales values, the ratios change. For all battery and free-range eggs (table 5.9), and battery egg production only (table 5.10), the advertising/sales ratio become: 1986: 0.17

1987: 0.16

1988: 0.15

(In 1986-1988 there was no commercial free-range egg production by the surveyed producers).

The free-range egg producers interviewed who advertised eggs, did not differentiate their battery eggs and free-range eggs at any stage. They advertised eggs generically, whether instore or in the media.

5.2.2 Wholesaler/Producer Cooperative

A total advertising cost of \$2500 was reported, corresponding to only 1992. No advertising was said to have occurred 1986-1991.

5.2.3 Retailers

5.2.3.1 Supermarkets and Grocers

There was no external advertising of eggs by the eleven retail outlets spoken with. Two retailers added the comment that they felt there was no need to advertise eggs as people always wanted them. They believed that any advertising would be a waste of money, as additional sales would be unlikely to cover the advertising costs.

5.2.3.2 Dairies

One of the twelve dairies sampled, who sold only battery eggs, advertised their eggs externally in 1991 for a period of three months at a cost of three hundred dollars. This

corresponds to a volume of 3 120 dozen sold at \$2.85, giving an advertising-sales ratio of 3.38. Therefore, in 1991, for each dollar sale of eggs, 3.37 cents was spent on the advertising of those eggs. In terms of the advertising theory outlined in chapter two, this figure falls into the short-term experience good category (Davis et al, 1991). This advertising occurred for only a short period of time to inform consumers that the outlet had cheap eggs for sale. Therefore, the change of category may be explained by consumers having to find the eggs, see that they were cheaper than their normal egg sellers, and trying them to ascertain their quality. It must be reiterated that this advertising ceased after three months and eggs were once again only advertised by a sign on the shelf.

5.2.3.3 Service Stations

None of the service stations sampled advertised eggs. The volumes carried were very low, with a maximum of five dozen a week delivered.

5.2.3.4 Butchers

One butcher did advertise externally using the newspaper and radio in 1991/2. However, the advertisement was mixed with other lines so he was unwilling to estimate a figure. However, given information from the radio stations, thirty seconds would have cost approximately thirty dollars. The newspaper advertisement is more difficult to estimate as it depends upon size, but given other butcher advertisements it would have cost between sixty and eighty dollars.

Eggs were only included when there was a special deal on price and quantity, otherwise they were not specified.

5.2.3.5 Fruiterers

Two of the fruiterers advertised, but neither could provide information on cost. In one instance the eggs were advertised with other products on the radio, (where again, thirty dollars for thirty seconds applies) whilst in the other it was run in a free-newspaper when a special deal was available. (This can be estimated to be between thirty and fifty dollars).

For both outlets eggs were advertised when there was a special, and they were advertised only on this attribute.

5.2.4 Summary

Table 5.11 summarises what the producers, retailers, wholesaler and producer cooperative interviewed, reported saying they spent on advertising:

TABLE 5.11

WHAT SURVEYED PRODUCERS, WHOLESALERS AND
PRODUCER COOPERATIVE IN THE MANAWATU,
AND SURVEYED RETAILERS IN PALMERSTON NORTH
REPORTED THAT THEY SPENT ON ADVERTISING EGGS 1986-1992

YEAR	PRODUCERS	WHOLESALER/ PROD. COOP	RETAILERS	TOTAL
1986	\$ 8 265*	0	0	\$ 7 890
1987	\$ 8 265*	0	0	\$ 7 890
1988	\$ 8 265*	0	0	\$ 7 890
1989	\$ 4 340	0	0	\$ 4 340
1990	\$ 4 140	0	0	\$ 4 140
1991	\$ 4 840	0	\$ 300**	\$ 5 140**
1992	\$10 840	\$ 2 500	0**	\$13 340**

* Includes the estimated NZPB advertising expenditure of \$4 125 and \$4 140 specified by the surveyed producers.

** There were retailers who advertised but would not give a figure for reasons set out above.

5.3 DIRECT ESTIMATE OF ADVERTISING EXPENDITURE (EXCLUDING PACKAGING): INFORMATION CONTENT OF ADVERTISING

5.3.1 Producers

The retail outlet research brought six brands to light which are presented in cartons, made of plastic, fibre, or cardboard, to the consumer. Two of these brands had several packets for various quantities and sizes of eggs. A packet from each brand and the two 'specific' types of eggs (grain-fed and free-range) are shown in illustrations one to eight over the page.

These cartons all give information to the consumer, and the type and verifiability of this information is of interest.

Illustrations one to four show the lids of the battery egg packets. The colours of the packets and wording are different, but the information is essentially the same. All have the type, size, quantity and 'use-by' date of the eggs in similar places, and the name of the farm, wholesaler or egg floor the eggs have come from is centrally located.

Illustration five is different from all other battery packets in that it is a cardboard box, has a brand-name, the quantity and size of the eggs, the title "farm fresh", but no other information. There is no link at all back to a producer.

Illustrations six and seven show the two free-range packets that were located. None of the eggs produced by the free-range producers interviewed in the Manawatu were located in the shops visited. Illustration six is marketed by a local wholesaler. The information is similar in layout to that provided for battery eggs, although size is not mentioned. The back of the packet gives the street location the eggs were packed at, which means a consumer could go and check to see whether battery and free-range eggs were kept separate at the egg floor before they were packaged. However, in terms of verifying the living conditions of the hen which laid the egg, this information is not presented to the consumer.

Illustration seven is supplied by a free-range farm in Auckland, set up under copyrighted MAF guidelines. The packet is clear plastic, and the brand-name is stamped into this. The label has been reproduced here since it illustrates the information given to the consumer. The producer defines how their hens live, guarantees them to be drug-

free and MAF inspected. The town location of the farm in Auckland is given, so it is feasible for a person to travel to the source of the eggs and inspect them. In addition, there have been articles in the New Zealand Herald (for example March, 1993) commenting on this production unit. In terms of a consumer wanting to assess this information, it would be possible to do so. Not surprisingly, this brand's eggs have the largest and most illustrated display found in any retail outlet (see section 5.3.2).

The final illustration is the lid from the only grain-fed eggs found for sale in the retail outlets visited. The lid gives the brand, type of egg and guarantee for low-cholesterol, and is repeated inside the lid. No information on the source of the eggs is given. Consumers would be able to locate a packing address from another packet of the same brand but the information is not contained on the packet itself.

The researcher tried to obtain estimates for the expense of packaging and printing labels on packaging from producers, with limited success. While producers could give an estimate of the cost of packaging (see below), they had no figures for total costs or total number of packets used, nor could they estimate the costs of printing information on the packets. For this reason the costs of the informational content of printing on packaging will be excluded from the final estimates. Figures supplied by producers suggested that a tray which holds two and a half dozen eggs cost fifteen cents in 1986 and twenty-two cents in 1992; a packet was said to be worth twenty cents in 1992. A box was estimated at \$3.50, and held fifteen dozen eggs. Trays and boxes were usually returned to the producer, so yearly costs would have varied depending upon how much packaging was returned, on how much additional packaging that was needed to cope with increased egg production, and how the eggs were packaged when they were sold at the gate, to retailers and so on.

Obtaining a valid estimate was not possible for these reasons. Producers either did not wish to give this information, or did not have an exact figure to give. This raises the question again, of whether they saw packaging costs as a cost of production instead of an advertising cost. From conversations with them, it appears to be the former, and therefore this thesis treats packaging as part of production costs.

ILLUSTRATION ONE

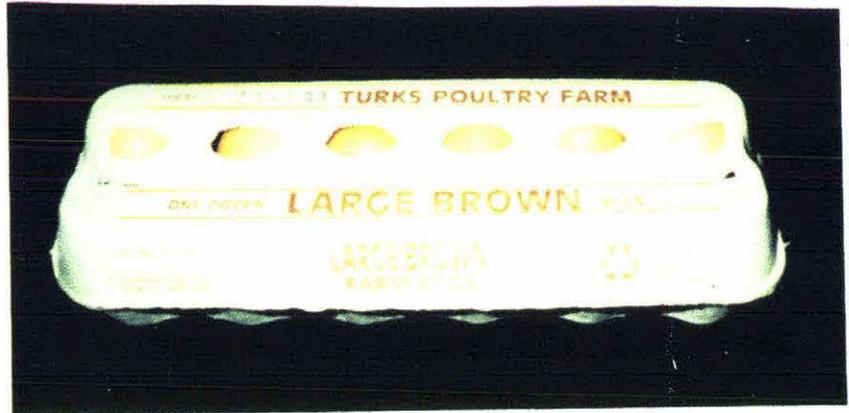


ILLUSTRATION TWO



ILLUSTRATION THREE



ILLUSTRATION FOUR



ILLUSTRATION FIVE



ILLUSTRATION SIX





Frenzs Farms are regularly inspected and the hens and eggs regularly tested by the New Zealand Ministry of Agriculture and Fisheries. Frenzs do not use pesticides, antibiotics or any restrictions on the hens to range outside.



SIX LARGE EGGS

These free range eggs are laid by uncaged hens free to range outside on pasture 24 hours per day, 365 days per year.

PLEASE KEEP REFRIGERATED

THE FREE RANGE EGG & POULTRY CO. PUKEKOHE, NZ.

BEST BEFORE

21 APR 1993

PRINTED ON 100% RECYCLED PAPER

ILLUSTRATION EIGHT

BEST BEFORE:

NET 390 GRAMS



ALL-GRAIN EGGS

Hens fed on an ALL-GRAIN diet
Contains NO ANIMAL PROTEIN
NO ANIMAL FATS

*Hen's diet
is Guaranteed
to contain the
lowest possible
cholesterol
levels*

PACKED AND MARKETED BY MANAWATU COOPERATIVE PRIMARY PRODUCERS LTD. PALMERSTON NORTH

Our Hens enjoy a Special All Grain Diet containing freshly ground Maize, Barley, Oats, Wheat, Wheat Bran and Soya Beans.

The Diet contains no Animal Protein or Animal Fats, and is very low in Cholesterol.



All Grain eggs are an inexpensive and natural food, with high quality protein, low in calories, and contain a wide range of essential nutrients.

Little Red Hen All Grain Eggs are one of the very best foods you can buy.

5.3.2 Wholesalers/Producers Cooperatives

Overall, five brand signs made of a plastic material advertising Little Red Hen eggs were discovered in various retail outlets. There was a logo, packet of eggs and three blocks of colour on the sign. (These are discussed further in appendix five). A sign writer in Palmerston North estimated that these would have cost \$60 to \$100 to make. This cost would have been incurred since 1988/9, when the NZPB ended. In this case an estimate can be made for the signs that were found: they would have cost between \$300 to \$500 in total.

Packaging costs that these firms face would assumedly be similar to those faced by producers. However, since no volume information was released by these firms no estimation is possible on these costs. In addition, the same problem found with producers also exists: there is no indication of how many eggs sold through the wholesaler/producer cooperative were packaged or loose. This would affect the packaging costs and advertising costs.

Two outlets used hutches, one of which was provided by the local producer cooperative, and the other by an Auckland producer.

The 'local' hutch was painted dark brown, stood 2.130 metres high and 0.985 metres square. It stood in a supermarket/grocer store beside the wire cages, and sold loose eggs, with unbranded boxes provided for the customers. The signs associated with the hutch were produced by the retail outlet, and gave the prices and quantities of the loose eggs. The supplier was noted on a small sticker in the bottom left hand corner of the larger signs. No claims about the type of eggs were made, other than they were loose eggs.

The other hutch was unstained wood, 1.9 metres high and 1.4 metres square. It was located away from the wire cages, by the dairy food (such as butter) and sold only free range eggs, both pre-packed (branded), and loose eggs. Again, unbranded boxes were available for the consumer to package the loose eggs. This hutch was aimed at providing information about the producer's free-range eggs.

A printed sign explaining the difference between 'farm fresh' and free range was 1.880 metres above the eggs; the prices and quantities had been written in by the

retailer. Pictures (310mm by 395mm) which showed healthy brown hens feeding in lush green grass were displayed around the hutch also at 1.880 metres. These emphasised the written information which provided information about the birds being outside in a green environment as opposed to being in cages. The sign explained why most farm eggs were not free range eggs, but battery eggs, and then emphasised that their product was free-range.

It is not possible to compare the two hutches with regards to the image they want to give to consumers. One hutch clearly states that free-range eggs are sold, and gives a guarantee on its packaging. The other hutch has retail signs which note the brand name but do not emphasis it. No claims are made about the eggs located there, other than their size, prices, and that they are sold loose. In addition, the free-range eggs sold by the same producer are sold in the retail outlet, but are located on the wire rack, a metre away from the hutch. Therefore, drawing a comparison is not possible.

In terms of costs, the first hutch was given no estimated cost. A tradesperson said that although it would be difficult to cost the hutch accurately, it would be a minor expenditure. It should be noted that the second hutch is not a Manwatu producer's cost, nor a Palmerston North retailer's cost. The cost is incurred out of town, and the eggs it stocks are not advertised by the retailer. Therefore, an estimate of its cost has no valid part in this research, although its information content does.

5.3.3 Retailers

5.3.3.1 Supermarkets/Grocers

(a) In-Store Retail Signs

Of the eleven outlets visited in this category, three did not have an in-store sign. Five stores had more than one sign, since they sold more than one brand or type of egg. A total of twenty-eight signs were found, their sizes varying with the amount of eggs sold (for example, the shops with no signs had a low volume of eggs sold per week), and with the amount of shop space the egg display occupied in an outlet. Shops with signs

could have one sign for all their eggs, or in some cases, had eight to ten signs per store. The paper ranged in cost from twenty-cents to two dollars. (For a more detailed analysis see appendix five).

(b) Branding signs

The information content of these are discussed in appendix five, and the cost aspect under Wholesalers/Producer Cooperatives, section 4.3.2 above.

(c) Packaging

In the stores which had packaged eggs, consumers obtained information this way. This is discussed in section 5.3.1 above.

5.3.3.2 Dairies

(a) In-Store - Signs

Four of the twelve dairies sampled used in-store signs, although none of these recorded the shop name nor free-range eggs, although these were said to be sold.

An analysis on this information is discussed in appendix five. The estimated costs of these signs was at maximum one dollar, as all retailers used materials on hand.

(b) In-store Signs - Branding Signs

Of the twelve stores sampled, none had any brand signs. Across the population of dairies it would be unlikely that other dairies would have been supplied with signs as their turnover of eggs is usually low (five to ten dozen a week) and they commonly stock only one brand (if any) of eggs.

(c) Packaging

Three dairies sold loose unbranded eggs. The remaining nine dairies surveyed sold the following branded eggs: Little Red Hen, Turks Poultry Farm, Hessels Poultry Farm, Thurstons Poultry Farm, and Golden Lay Eggs. Therefore in some dairies consumers were given information on the egg packets. This is discussed in section 5.3.1 above.

5.3.3.3 Service Stations

(a) In-store Signs

Ten service stations were sampled, but only four were found to sell eggs (see sections 5.1.3.3 and 5.2.3.3). Of these four outlets, only three had signs displayed with their eggs, in each case below the shelf the eggs were on. The information gave price, quantity and size of eggs only. For a further discussion of the information content of the signs, please see appendix five.

An estimated cost of these signs is two dollars for each year 1990 to 1992, the time when the people interviewed had been there and when they remembered prices being changed.

(b) In-store Signs - Branding Signs

No specific signs advertising a brand of eggs were located in any retail outlets.

(c) Packaging

All the eggs sold in the service stations were branded, so the consumer would know at a glance what size egg they were buying and where it came from. (See section 5.3.1)

5.3.3.4 Butchers

(a) In-Store - Signs

Of the butcher shops sampled, one did not sell eggs and one did not have signs. Of the three who did have signs these either gave prices and quantities or stated "eggs". (See appendix five for further analysis).

The cost for these signs was estimated at under one dollar for the period under investigation.

(b) In-Store Signs - Branding Signs

There were no branding signs in any of the visited butcher stores. One store did, however, have branded boxes.

(c) Packaging

None of the surveyed butchers sold packaged eggs.

5.3.3.5 Fruiterers

(a) In-Store Signs

All four outlets had signs displayed with their eggs. All signs were either black card-board or an actual blackboard, with the words and prices written in white, although in one case orange was used for the heading and green was used for the egg quantity. These were generic and gave price and quantity, although the displays had had thought and time spent on them (see Appendix five).

In one case a barrow was used, with straw and a wooden chicken. The signs were reusable in all but one case, so the cost is considered a one-off cost. However, the people spoken with could not estimate the cost of the signs, and felt that it would be inappropriate to do so, as the boards were not specifically bought to write egg prices on.

(b) In-store Advertising - Branding Signs

All the shops sampled sold only tray eggs, no direct branding signs were displayed, nor were any packaged brands.

(c) Packaging

None of the surveyed fruiterers sold packaged eggs.

5.3.4 Sign Summary

Although no summary of the costs of signs is possible, mainly because of the difficulties of verifying that all brand signs were included in the survey, it is clear that total costs for signs are very low. It is estimated that the handmade instore signs and the branding signs would total to approximately \$2 000 at most across the period under investigation. (This includes the display units of the local hutch and the barrow).

5.3.5 The Media in Palmerston North

This search covered the print and aural media in Palmerston North, as outlined in chapter four. A systematic random sample was taken for each year 1986-1992 across the Manawatu Evening Standard, the Guardian, Tribune, More magazine, North and South magazine, the Listener, and the New Zealand Woman's Weekly. Advertisements were found in the two former and two latter publications.

5.3.5.1 The Print Media

As mentioned earlier (section 5.2.1), the NZPB used the Listener and NZWW to advertise eggs generically through-out New Zealand. These costs were noted because they were aimed to increase egg sales nationwide, and are therefore assumed to have benefited the producers, retailers, wholesalers and producer cooperatives of Palmerston North. This advertising totalled (for television, radio and magazines) between \$70 000 to \$80 000 for 1986-1988.

Advertising did occur in the Manawatu in the period 1986-1992, but was only found in the Manawatu Evening Standard and the Guardian. The findings from the systematic random sample are presented below in table 5.12. The costings are based upon those given by the printers of the newspapers.

During this research, two advertisements for free-range eggs were found, one in 1990 and another in 1992 (see appendix six). These were estimated to have a cost of \$5.46 and \$19.08 respectively, and is the only media cost of advertising that was found for free-range eggs. The eggs are not advertised by a commercial free-range egg producer, and may be backyard production. In addition, the larger advertisement was a regular feature in the newspaper, and although it specified eggs were sold in other advertisements, only once in the seven years under review were free-range eggs stipulated in the advertisement.

Although this production does not relate to a commercial producer, it is free-range egg advertising and can be used, in conjunction with the estimates of the volumes of free-ranges in section 5.1.1.1 and prices from retailers and producers interviewed, to formulate two advertising-sales ratios. In 1990, \$5.46 divided by 27 625 dozen eggs x

\$3.80/dozen gives a ratio of (in percent) 0.0052. In 1992, \$19.08 divided by 52 133 dozen eggs x \$3.80/dozen gives a ratio of (in percent) 0.0096. These ratios are considerably lower than those found for the battery eggs (see section 5.2.1).

TABLE 5.12

EGG ADVERTISING EXPENDITURE
IN PALMERSTON NORTH FROM THE SAMPLE ONLY
1986-1992

YEAR	GUARDIAN No. ADS*	GUARDIAN COSTS**	EVENING STD No ADS*	EVENING STD COSTS**
1986	1	\$ 34.56	3	\$ 286.65
1987	0		11	\$ 579.60
1988	0		7	\$ 414.10
1989	0		0	\$ 000.00
1990	1	\$ 175.05	33	\$ 965.68
1991	0		21	\$ 871.08
1992	2	\$ 456.05	24	\$ 267.30

* Number of advertisements found in the newspaper

** Costs of those advertisements found

Therefore, the largest quantity of advertising in Palmerston North was done in the Evening Standard. The advertisements were placed by fruit farms (1986-1991), poultry farmers, (1990-1992) or by Massey University (1986-1988) who used to sell eggs 1986-1988 with fruit and vegetables. A poultry farmer who advertised frequently is still in business, but when interviewed gave a low advertising cost. This is likely to have occurred because the main item being advertised is actually pullets (young chickens), the eggs are a secondary item.

These costs are based on random samples, so a scaling up of these figures to the population results in the following total advertising expenditure for each year to be

estimated (See table 5.13). The scaling up was done by dividing one hundred percent by the sample size (also in a percent), giving a weighting value. For example: in 1986, $100\% \div 22\%$ gives 4.545455. Multiply this by \$286.65 and the scaled up value of advertising in the Manawatu Evening Standard is \$1302.95.

TABLE 5.13
SCALED UP EXTERNAL ADVERTISING EXPENDITURE
FOR PALMERSTON NORTH 1986-1992

YEAR	SCALING: $100\% \div n\%$	GUARDIAN TOT. COST	SCALING $100\% \div n\%$	E/STD TOT. COST	TOT. EST AD COST
1986	3.571429	\$ 123.43	4.545455	\$1302.95	\$1426.38
1987		0	4.255319	\$2466.38	\$2466.38
1988		0	4.385965	\$1816.23	\$1816.23
1989		0		0	0
1990	3.125	\$ 547.03	4.424779	\$4272.92	\$4819.95
1991		0	4.545455	\$3959.45	\$3959.45
1992	3.571429	\$1628.75	4.716981	\$1260.85	\$2889.60

Examples of the advertisements from the local papers are shown in appendix six. As a comparison to advertising under the NZPB, an advertisement from both the NZWW and the Listener are presented.

The NZPB personified eggs, giving them a spokesperson (Hubert), and dressing him in a chef's hat and apron. Recipes were a standard feature of egg marketing under the NZPB, to advertise the product's versatility. Local advertising provided only factual information: where the eggs were available from and sometimes at what price. Eggs were sold generically in all but two of the advertisements located in this search.

5.3.5.2 Radio

The radio stations which run advertisements in Palmerston North were contacted and asked if they could furnish information on egg advertisements which had occurred on their radio station 1986-1992. The four stations all stated that no advertisements were on their records. However, one dairy owner said he ran radio advertisements, and several fruiterers also used the radio. This usage was between 1990 and 1992. The radio stations provided cost information of approximately thirty seconds for \$30. Since a dairy, butcher and two fruiterers advertised in 1991 or 1992, a few hundred dollars would have been spent in this medium in those years. However, no discussion of the information these advertisements may have provided is available.

5.3.6 RECONCILIATION

It was difficult to obtain a direct estimate of everything, but comments made by the surveyed egg sellers indicates that the final media figures of table 5.14 require Yellow pages, radio, and sign costs to be added for each year. From the surveyed producers, several indicated that they had placed advertisements in the Yellow pages at some stage during the period under investigation, but did not record this as an advertising expense.

The placing of a companies name, address and phone number in the Yellow pages is free, but placing an advertisement is charged per height and column width. From conversations with the various producers, it became clear that some of them had placed advertisements, although not until the late 1980s. Therefore, assuming that two producers placed one column wide, and six centimetre high advertisements in the Yellow pages 1990 to 1991 at \$680 (excluding GST) must be added to those years. One producer who was interviewed placed a smaller advertisement in the 1992 telephone directory, but did not record this when they were surveyed, so \$100 (excluding GST) must be added to that year. (Another who did advertise did record it in the research).⁵

All instore signs were estimated in section 5.3.4 to be worth approximately two thousand dollars. Since instore signs were rarely changed, and the brand signs are

⁵ These figures were obtained from Telecom Directories and are the prices charged in those years.

understood to have been placed in stores after the NZPB demise, this cost will be added to 1989.

Radio costs discussed above show that an estimated three hundred dollars should be added to 1991 and 1992.

In addition, the NZPB advertising (estimated as \$4 125 for 1986-1988 in section 5.2.1) must be included in this section.

Therefore a comparison of the two methods of estimating egg advertising is set out in table 5.14. Due to data limitations, no advertising expenditure-sales ratio may be formulated with this, although these were found where possible, as recorded in section 5.2.1.

TABLE 5.14
ADVERTISING EXPENDITURE RECONCILIATION
(FOR ALL TYPES OF EGGS)
1986-1992

YEAR	METHOD ONE (WHAT WAS SAID)	METHOD TWO (WHAT WAS ESTIMATED)	DIFFERENCE
1986	\$ 8 265*	\$ 5 551*	\$ 2 714 (M1>M2)
1987	\$ 8 265*	\$ 6 591*	\$ 1 674 (M1>M2)
1988	\$ 8 265*	\$ 5 941*	\$ 2 324 (M1>M2)
1989	\$ 4 340	\$ 2 000	\$ 2 340 (M1>M2)
1990	\$ 4 140	\$ 5 499	\$ 1 199 (M1<M2)
1991	\$ 5 140**	\$ 4 939	\$ 201 (M1>M2)
1992	\$13 365**	\$ 3 289	\$10 076 (M1>M2)

* These figures include the NZPB advertising estimated for 1986-1988 (see page 86).

** There were retailers who advertised but would not give any figures because eggs were not the focus of the advertisement.

This table shows that there is a discrepancy between the two findings. The figure in 1992 found by using the second method has the most marked difference. This is most likely explained by two commercial egg sellers who stated that they began advertising in 1992. One stated that he advertised using displays in retail outlets, but despite locating the brand in several shops, no evidence of display material was found. The other portion of the discrepancy and those recorded during the other years are likely to relate to producers advertising in other local free-to-the-home Manawatu newspapers (in townships such as Fielding and Ashhurst) which were not under examination in this thesis. (These newspapers are not delivered to Palmerston North houses).

Despite this discrepancy, overall advertising expenditure in both estimates is still low in comparison to the volumes of eggs that are produced in the region. In the media, eggs were generically advertised in all cases except two in 1990 and 1992, when they were specified as free-range. (This information was verifiable if a consumer chose to drive to the place advertising the eggs). In comparison to the advertising of battery eggs however, free-range eggs had a low priority, as no local producers advertised their free-range eggs. The trend shown by this research was for retailers, producers and wholesaler and producer cooperative to advertise eggs generically, if they were advertised at all.

5.3.7 SUMMARY

Estimating the advertising expenditures of sellers of eggs, from packaging to displays to external mediums proved more difficult than had been originally thought. Battery eggs were advertised in-store and in the media more than free-range eggs (only two free-range egg advertisements to ninety battery egg or generic advertisements). While there was some discrepancy between the estimates of advertising expenditure, some advertising which occurred outside of Palmerston North may account for the difference. The majority of the discrepancy however, relates to advertising which the producers, wholesaler, or producer cooperative said they supplied to retailers but which was not located by the researcher.

Free-range eggs were not advertised by any of the local producers, and retailers did not do any external advertising either. The two free-range egg advertisements located in the Manawatu Evening Standard were not advertised by any of these businesses. Some retailers erected signs stating that eggs were free-range, but no verifiable information was provided. Only free-range eggs imported from Auckland were found to try to present verifiable information in-store, but the cost of this advertising with relation to sales values was beyond the scope of this research.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 SUMMARY OF THESIS

6.1.1 Ethics and the Economic Model

Ethics are assumed to enter the economic model through the profit function of the individual firm. Legal standards set by a government and managerial ethical standards will impact upon the cost function of the firm, while consumer demand for ethical products may impact on the revenue of the firm. In markets where there is competition (pure competition, non-collusive oligopoly, and monopolistic competition) firms which increase costs to provide ethical products over and above the standards required by the law will be at a competitive disadvantage unless they can charge a premium price to consumers.

In order to do so these producers need to use information markets to inform consumers of the ethical nature of their product. Thus ethics, other than those imposed by legal standards, impact on information markets. Since pure competition assumes perfect information, the markets affected are non-collusive oligopolies and monopolistic competition.

6.1.2 Information and Advertising

The advertising literature is reviewed and it is concluded that there are two main reasons for advertising, both involving the provision of information. First, advertising may be considered anti-competitive, in that it raises barriers to entry, or second, advertising may be considered pro-competitive, in that it decreases consumer search costs and therefore heightens competition in the marketplace.

Based on the assumption that advertising is mainly pro-competitive and is therefore a key variable in information markets, a number of hypotheses have been developed by

Davis et al (1991).

Davis et al (1991) suggest that advertising/sales ratios differ between four categories of goods:

(i) search goods, where the product characteristics are immediately verifiable from the information presented at the point of sale. These are expected to have a low advertising sales ratio;

(ii) short-term experience goods, where the product must be tried once to verify advertisement information. These are expected to have a slightly higher advertising/sales ratio than search goods;

(iii) long-term experience goods, where a product must be tried over time before any information can be verified. These are expected to have the highest ratios;

(iv) credence goods, where information can not be verified at all or where the consumer is expected to believe producer claims. The ratio is expected to be lowest for credence goods.

Ethical goods are assumed to be credence goods, as consumers are required to believe the claims producers makes unless the information is verifiable.

Therefore, the Davis et al (1991) hypotheses suggest different ratios for ethical goods, depending on the degree to which the information about the ethical product is verifiable.

6.1.3 Ethical Goods and The Egg Industry

Various goods were examined to see whether a product could be found with both an ethical and non-ethical version of the same good. Eggs were chosen for a case study since deregulation of the industry had led to a cessation of generic marketing, and the growth of product differentiation in terms of free-range and battery eggs. This division coincided with the perspective by some consumers of an ethical product (free-range eggs) and a non-ethical product (battery eggs).

6.1.4 Estimates of Advertising

Two estimates were made of advertising/sales ratios for free-range and battery eggs in Palmerston North/Manawatu. The first was derived from a survey of all existing producers who could be contacted, of the wholesaler and the producer cooperative in the

Manawatu, and of a sample of retailers in Palmerston North. The second estimate came from a direct survey of the media in Palmerston North, across three newspapers, four national magazines and local radio stations. The cost of advertising in the Yellow pages was also included.

6.2 RESULTS AND LIMITATIONS OF THE STUDY

6.2.1 Limitations

The research that has been conducted is a case study, and is therefore not generalisable to egg markets outside of Palmerston North, nor to other products which may, by definition, fit the categories devised by Davis et al (1991). The case study nature of the research precluded the possibility of using inferential statistics to test the hypotheses. The results are therefore discussed in terms of research questions.

There were limitations to the data collected. Retailers for instance were unable to provide advertising information when eggs were advertised with other products, and were vague about the precise quantities they had sold through their retail outlets.

6.2.2 Results and Conclusions

The first research question (see section 2.6) anticipated "that between 1986 and 1992 eggs as a generic good will have a low total expenditure on advertising with respect to sales." The advertising/sales ratios for all eggs (battery and free-range output, see table 5.9) were low. Davis et al (1991) expected search goods to have an average ratio of 1.79, although individual products included in their work show that some goods ratios are as low as 0.19, while others were as high as 1.17. The generic findings for eggs in the Manawatu were lower than this, although the inclusion of the NZPB advertising expenditure achieved ratios of 0.15 to 0.17 for the years 1986 to 1988. Once the NZPB left the marketplace after 1988, the ratios fell to a low of 0.057 in 1990, but rose to 0.13 in 1992, when advertising increased.

When eggs were separated into battery and free-range eggs, a change was noted. Examining only battery eggs (see table 5.10), the ratio was higher in 1990 and 1992.

In 1990 the ratio became 0.084, while it rose to 0.21 in 1992, a figure obtained by Davis et al (1991).

Therefore, the anticipated finding of research question one, that eggs as a generic product would have low total expenditure on advertising with respect to sales was obtained. The inclusion of the NZPB advertising 1986 to 1988 creates search good like ratios, and while the ratio declined between 1989 and 1991, the increases in advertising and sales in 1992 saw eggs move into the search good regions laid down by Davis et al (1991). These factors combined with the factual information presented by all advertising found in the stores and on all but three packets, shows these ratios to be consistent with Davis et al's (1991) hypothesis on search goods.

The second research question had two aspects to it. Part (a) stated that "free-range eggs are not expected to be more heavily advertised than battery eggs, unless the information can be made more verifiable to the consumer."

Free-range eggs were not advertised more heavily than battery eggs. Only two newspaper advertisements were found for free-range eggs, giving two advertising/sales ratios, one for 1990 (of 0.0052) and another for 1992 (of 0.0096). Of the surveyed egg sellers, no attempt was made to differentiate free-range and battery eggs in their external advertising. Packaging located in the retail outlets related to free-range eggs in only two instances, one a local packet and one imported from Auckland. The local packet gave a packing centre but no verifiable information on how the eggs were raised. The imported packet attempted to provide some verification (see below).

The ratios of free-range eggs are below the credence levels found by Davis et al (1991). However, since these ratios are expected to be lower than search good ratios, the free-range egg advertising appears to be consistent with the credence good hypothesis put forward by Davis et al (1991).

This leads to part (b) of the second research question. The information presented to consumers on free-range eggs was expected to be verifiable, whether via addresses, MAF, industry standards, if the producer wished to move the product out of the credence good category. No industry standard exists as yet (see section 6.3), nor do any general MAF guidelines. As was discussed above, the locally packaged free-range eggs

differentiated their product only by labelling it as free-range egg, but provided no verification about the method of animal husbandry used in the raising of the eggs. The Auckland packet however, has attempted to verify their product using a MAF inspection guarantee, and locates the township where the farm is located. In addition, the hutch used to display their eggs is clearly considered an investment in verifiability with photographs and information for the consumers. Therefore, some attempt appears to be being made to move the free-range eggs into a search good category.

A further conclusion that might be tentatively drawn in relation to the case study is that in the relative absence of verifiable free-range egg advertising, information markets were impaired to some extent. That is, some sections of the retail industry could not give a meaning to the term "free-range".

6.3 RECOMMENDATIONS

(a) Although no generalisable conclusions are possible, the case study does suggest that the hypotheses forwarded by Davis et al (1991) are plausible and need to be statistically tested on a wide range of goods. Therefore, it is recommended that if funds are available, using the advertising/sales ratios to test Davis et al's (1991) hypotheses over a wide range of goods would be beneficial to the development of the theory and practice of advertising.

(b) The confusion this research found in the information markets for free-range eggs suggests that there is a role for verifiable information designed to change an ethical credence good (a free-range egg) into a search good. It is recommended that the Auckland egg producer's attempts to provide such information be monitored in any future research in this area.

(c) The New Zealand Poultry Association is currently drafting a document to define free-range egg production, in conjunction with all egg producers in New Zealand as the

need for set guidelines and measurable standards. Such monitoring as outlined in (b) would provide valuable information to the industry as a whole.

(d) Since consumers are the final recipients of free-range and battery eggs, it is recommended that convening a tasting panel to examine the various egg types would benefit the industry and enable them to accurately portray the eggs in the information markets. For instance, if no taste or colour difference is discovered between free-range and battery eggs the focus of the information to consumers could be the ethical perspective. Further, it is recommended that surveying consumer perceptions and buying habits of free-range and battery eggs (such as the NZPB did with eggs as a generic item) would be a worthwhile piece of research for the industry in order to locate and target issues consumers are concerned with.

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ADVERTISING STANDARDS COMPLAINTS BOARD

12th Floor, ICL House, The Terrace
PO Box 10-675 Wellington
Telephone (04) 472-7852
Fax (04) 471-1785

DECISIONChairman's RulingComplaint 92/73

Complainant: H Kriek - SAFE
Advertisement: Farmyard Eggs

Complaint: The Complainant claimed that an advertisement in the Yellow Pages breached Rule 2 of the Advertising Code of Ethics. The Chairman accepted the complaint and parties were asked to comment which they did.

Shortly before the hearing the Complainant stated he would not sign the waiver (not to pursue the matter in another jurisdiction) and withdrew the complaint. He added that another person would lodge a complaint.

The Chairman therefore ruled that the complaint was withdrawn and it would not be placed before the Board.

Decision: Complaint Withdrawn

ADVERTISING STANDARDS COMPLAINTS BOARD

12th Floor, ICL House, The Terrace
PO Box 10-675 Wellington
Telephone (04) 472-7852
Fax (04) 471-1785

DECISIONMeeting 24 August 1992Complaint 92/103

Complainant: J Farnborough
Advertisement: Farmyard Eggs

Complaint: An advertisement in the Yellow Pages of the Waikato telephone book for Farmyard Products Ltd had the headline "Farm Yard Eggs with the Guarantee for Freshness." The body copy said "Farmyard Products Ltd Producers & Distributers of Farm Yard Eggs "For Best Possible Prices Call Us."

The Complainant said, "This company advertises itself as producers and distributors of farmyard eggs. I consider this misleading as all their eggs are produced by caged hens inside sheds, and not in a farmyard.

The Collins English Dictionary defines farmyard as 'an area surrounded by or adjacent to farm buildings' and yard as 'a piece of enclosed ground often adjoining or surrounded by a building or buildings.'

The name farmyard suggests that hens are kept outside (free range). Farmyard Products cartons suggest the same by depicting a scene of chickens and other animals freely roaming in a paddock. Aware consumers, concerned about the cruelty in battery hen farming, now choose to buy free range eggs. By advertising battery eggs as farmyard eggs consumers might be unwillingly purchasing a product they do not approve of and would not buy if it was correctly advertised."

The relevant provision in the Codes is Rule 2 of the Advertising Code of Ethics which states (in part):

"Truthful Presentation - Advertisements must not contain any statement or visual presentation which directly or by implication, omission, ambiguity or exaggerated claim is misleading or deceptive, is likely to deceive or mislead the consumer, or makes false and misleading representation"

The advertiser through its solicitor made a comprehensive reply and said,

- "1. The complaint is unfair, vexatious and misleading. The name of the Company is Farmyard Products Limited. The complainant has deliberately chosen to ignore the fact that the Company is only using its name Farmyard Products Limited. The Company is quite entitled to do this. It is submitted such an advertisement cannot be misleading. The phrase farmyard used in this sense merely identifies the name of the product. The advertisement guarantees that the eggs will be fresh. No other representation is made.
2. The dictionary definition of "farmyard" is irrelevant for this exercise. Farmyard is a part of our clients Company's name and this is clearly conveyed in the advertisement. Our client Company operates as a producer and distributor of eggs. It is quite properly located in a rural setting and more particularly is easily identified as having a farmyard setting. It is entirely appropriate, honest and proper for our client Company to advertise as being producers and distributors of farmyard eggs.
3. The advertisement placed in the Yellow Pages was the result of careful planning following consultation with an advertising agency and a patent attorney. Careful regard has been had to the Advertising Code of Ethics.
4. We submit that the statement concerning cruelty in battery hen farming contained in the complaint is effectively defamatory. The comment has not been substantiated by evidence and warrants nothing other than a summary dismissal."

With regard to Rule 2 they said, "The advertisement is not misleading or deceptive or likely to mislead or deceive the consumer. The advertisement is merely an advertisement for eggs which are guaranteed to be fresh. The use of the word farmyard identifies the product as being a product of our client Company."

The media said, "We are not aware of any specific requirement which precludes a Company from using the word "farmyard", particularly in the Company name. Given that "Farmyard" appears in their company name, it is unlikely you can satisfy Mr Farnborough's request to stop the company using the name "Farmyard".

The details contained in the Yellow Pages advertisement provided were prepared following discussions with the advertiser.

We have no further constructive comments to add to on this subject and will be happy to comply with the Board's decision once it is made and advised to us."

The Board first addressed the reference to packaging. The question was whether packaging is an advertisement. The purpose of packaging is to protect the base product, make it attractive for sale, identify brand and to provide information to prospective buyers. In marketing terms packaging is considered part of the product while advertising is considered part of promotion.

The Board ruled that packaging was not an advertisement and therefore the Board did not have jurisdiction.

Another preliminary point was the inferred claim by the Complainant of cruelty to battery hens. This was not the concern of the Board but of other authorities. The powers of the Board were to adjudicate whether the advertisement breached the Advertising Codes of Practice.

With regard to the Yellow Pages advertisement the Board noted that the name of the company was Farmyard Products Ltd. This name was legally protected as it was the name of the company. It was the view of the Board that the advertiser could therefore use the phrase "Farmyard Eggs" as they would be a product of Farmyard Products Ltd.

The Board noted however that the words used in the advertisement were "Farm Yard" which in the view of a majority of the Board inferred that the eggs were laid by hens who were in a yard. In other words that the hens were "free range" and therefore the eggs were "free range eggs". This was particularly so with the statement "Producers & Distributors of Farm Yard Eggs" which to the reader inferred that the eggs were "free range eggs." The same inference was given in the headline "Farm Yard". The majority were therefore of the opinion that Rule 2 had been breached.

The advertiser's argument was based around the word being "farmyard" but this was not the position.

A minority of the Board were of the view that the differentiation was too technical and that because the business was in the country the use of the words Farm Yard did not breach Rule 2.

The Board therefore ruled that the advertisement breached Rule 2.

Decision: Complaint Upheld



APPENDIX TWO

PRODUCER STRUCTURED INTERVIEW FORMAT

Since the mid-1980s a variety of brands and types of eggs have appeared on the egg market. This study wishes to find out how much and what type of information, from any source, consumers were given about the different types of eggs and what the cost of this information was to the producer, wholesaler and retailer.

Your help in this study is valuable as it will enable a picture of the market between 1986 and 1992 to be established.

As the respondent, you have the right to decline to answer any questions you choose, however, all information in this questionnaire is confidential and no producer shall be named in the research. The area shall only be referred to as the Manawatu area (as defined by the attached map); no township within the area will be specified.

1. How many years have you been farming eggs
on this property? _____

2. What total number of laying hens did you
have in the years 1986-1992?

1986 _____
1987 _____
1988 _____
1989 _____
1990 _____
1991 _____
1992 _____

3. What do you define as "free-range" egg production?

4. Have you ever raised free-range eggs? (please circle)

YES NO

5. If yes, from what date? 19

*IF YOU ANSWER YES TO Q5 PLEASE GO TO Q6.
IF YOU ANSWER NO TO Q5 PLEASE GO TO Q7.*

6. Do you still produce free-range eggs? (please circle)

YES NO

If NO, when did you stop producing free-range eggs?

19__

Why did you stop producing free-range eggs? _____

7. What types of eggs did you produce in 1986-1992, and from what date?

- | | | |
|--|-------|----------|
| | TICK | |
| A. All Free-range | _____ | FROM: 19 |
| B. All Battery
eggs (various sizes) | _____ | FROM: 19 |
| C. Both battery
and free-range | _____ | FROM: 19 |
| D. Grain-fed | _____ | FROM: 19 |

*IF YOU DO PRODUCE FREE-RANGE EGGS PLEASE GO TO Q8.
IF YOU DO NOT PRODUCE FREE-RANGE EGGS PLEASE GO TO Q10*

8. Why did you chose to produce free-range eggs?

9. What are the major differences between producing free-range eggs and battery eggs in terms of:

A: Physical Production Systems (such as housing)

B: Costs (such as feed, labour)

C: Other

10. What total volume and costs of each egg type have been achieved since 1986 or from the starting date, if post-1986?

YEAR	BATTERY TOT. VOL (doz)	COST/DZ EGGS (battery)	FREE-RNG TOT. VOL (doz)	COST/DZ EGGS (free- range)
1986				
1987				
1988				
1989				
1990				
1991				
1992				

11. In 1986-1992 did you sell your eggs:

	Free-range		Battery	
	Y	N	Y	N
A. At the farm gate	Y	N	Y	N
B. Direct to a retailer	Y	N	Y	N
C. To an independant wholesaler	Y	N	Y	N
D. To a producers cooperative	Y	N	Y	N
E. Other(specify)	Y	N	Y	N

What sort of retailers? _____

What type of wholesaler? _____

What type of producer cooperative? _____

12. What quantities were sold to these various groups 1986-1992, and what was the average price received through these years?

AT THE GATE

YEAR	% FREE-RANGE	AVE PRICE (free-range)	% BATTERY	AVE PRICE (battery)
1986				
1987				
1988				
1989				
1990				
1991				
1992				

TO RETAILERS

YEAR	% FREE-RANGE	AVE PRICE (free-range)	% BATTERY	AVE PRICE (battery)
1986				
1987				
1988				
1989				
1990				
1991				
1992				

TO INDEPENDANT WHOLESALER:

YEAR	% FREE-RANGE	AVE PRICE (free-range)	% BATTERY	AVE PRICE (battery)
1986				
1987				
1988				
1989				
1990				
1991				
1992				

TO PRODUCERS COOPERATIVE

YEAR	% FREE-RANGE	AVE PRICE (free-range)	% BATTERY	AVE PRICE (battery)
1986				
1987				
1988				
1989				
1990				
1991				
1992				

13. If you sold at the gate or direct to a retailer,
did you use your farm-name for selling your product?
(Please circle)

YES NO

If NO, did you use a brand-name? YES NO

If YES, what was it? _____

14. If you sold to a wholesaler or producer cooperative
did they use a brand name?

YES NO

If yes, what was it? _____

15. What year did competition first become obvious
after 1986?

19__

In what way did it make itself felt? _____

16. As a producer how much did **YOU PERSONALLY** spend on all forms of advertising (such as gate signs, newspaper advertisements), in the period 1986-1992, excluding branding and packaging costs?

TOTAL EXPENDITURE ON ADVERTISING

YEAR	GATE	RETAILER	WHOLESALE	PROD. COOP
1986				
1987				
1988				
1989				
1990				
1991				
1992				

16. What was this spent on?

	TICK
Gate: Newspapers	_____
Signs for the gate	_____
Magazines	_____
Yellow Pages	_____
Other _____	_____
Retailer: Posters	_____
Display Boards	_____
Other _____	_____

Why did you advertise? _____

IF YOU PRODUCED FREE-RANGE AND BATTERY EGGS, did you differentiate in your selling between your battery and free-range eggs?

YES NO

If yes, how? _____

What portion of your advertising went on the selling of free-range eggs?

_____%

17. If you had a brand, or used your farm-name what was the total expenditure spent on promotion and packaging costs in this period?

YEAR	BRANDING	PACKAGING
1986		
1987		
1988		
1989		
1990		
1991		
1992		

APPENDIX THREE

RETAILER STRUCTURED INTERVIEW FORMAT

Since the 1980s a variety of brands and types of eggs have appeared on the egg market. This study wishes to find out how much and what type of information, from any source, consumers were given about the different types of eggs and what the cost of this information was for the retailer, producer and wholesaler.

Your help in this study is valuable as it will enable a picture of the market between 1986 and 1992 to be established.

As the respondent you have the right to decline to answer any questions you choose. All information in this questionnaire is confidential, and will be used only for the purpose of this research. No retailer shall be named in the research; only generic terms such as dairies, service stations and supermarkets shall be used in the discussion of the findings.

1. What is your position in this retail outlet?

MANAGER OWNER CLERK/ASSISTANT EGG MANAGER

How long have you held this position in this retail outlet?

Number of years: _____

2. Did you sell fresh eggs between 1986 and 1992?

YES NO

If YES, please go to Q3.

If NO, please go no further.

3. As a retailer, what do you define as a free-range egg?

4. What type of eggs did you sell 1986-1992, and from what year?

Free-range	_____	19
Battery (sizes 5, 6, 7)	_____	19
Grain-fed	_____	19
Battery (jumbo/super lrg)	_____	19

5. Where there brand-names associated with these? Y N

If YES, what were they and how long have you held them?

Free-range:

Battery (5-7 sizes):

Grain-fed:

Battery (Jumbo):

IF YOU SOLD FREE-RANGE EGGS, PLEASE GO TO Q6

IF YOU DID NOT SELL FREE-RANGE EGGS, PLEASE GO TO Q7

6. Why did you begin to sell free-range eggs?

7. What volumes and prices were recorded for the period 1986-1992 for free-range and battery eggs?

FREE-RANGE:

YEAR	TOTAL VOLUME (dozen)	AVE RETAIL PRICE/DOZ
1986		
1987		
1988		
1989		
1990		
1991		
1992		

Where did you purchase these eggs from? (names not necessary).
Please give a percentage of total volume above.

GATE AND PRODUCER DELIVERIES

YEAR	GATE SALE %	AVE COST PRICE/DOZ	PRODUCER DELIVER %	AVE COST PRICE/DOZ
1986				
1987				
1988				
1989				
1990				
1991				
1992				

WHOLESALER/PRODUCER COOPERATIVE

YEAR	WHOLESALER %	AVE COST PRICE/DOZ	PROD. COOP %	AVE COST PRICE/DOZ
1986				
1987				
1988				
1989				
1990				
1991				
1992				

BATTERY:

YEAR	TOT VOL (DOZ)	AVE RETAIL PRICE/DOZ
1986		
1987		
1988		
1989		
1990		
1991		
1992		

Battery

Where were these eggs purchased from? (No names necessary).
Please give percentage of total volume above.

GATE AND PRODUCER DELIVERIES

YEAR	GATE SALES %	AVE COST PRICE/DOZ	PRODUCER DELIVER %	AVE COST PRICE/DOZ
1986				
1987				
1988				
1989				
1990				
1991				
1992				

WHOLESALE AND PRODUCER COOPERATIVES

YEAR	WHOLESALE %	AVE COST PRICE/DOZ	PROD COOP %	AVE COST PRICE/DZ
1986				
1987				
1988				
1989				
1990				
1991				
1992				

For consumers to be aware of different types of eggs, they must be given information, either in-store or out-of-store. It is this area the final questions relate to.

8. Did you advertise eggs to consumers outside of your store during 1986-1992?

YES NO

IF YOU ANSWER NO PLEASE GO TO Q10

If YES, in what form: Flyers
 Newspaper food spreads
 Newspaper classified
 Other (please specify)_____

IF YOU SOLD FREE-RANGE EGGS PLEASE ANSWER THIS QUESTION:

Did you differentiate between free-range and battery eggs in your advertising?

YES NO

If YES, if what way? _____

If YES, why? _____

If NO, why not? _____

9. What was the total expenditure on advertising each year, for eggs only using these methods?

	Percent on free-range
1986	\$
1987	\$
1988	\$
1989	\$
1990	\$
1991	\$
1992	\$

Why did you advertise externally? _____

10. Did you use in-store signs, with your retail outlet name printed on them in the period 1986-1992?

YES NO

IF YOU ANSWER NO PLEASE GO TO Q11

If Yes, how often were they changed? _____

What cost would each sign have been? _____

11. Did you have a display unit for your eggs?

YES NO

IF YOU ANSWER NO PLEASE GO TO Q12

If YES, what was it like? _____

Who provided it and when?

Did it change at all 1986-1992? YES NO

If YES, how? _____

If you, the retailer provided it, what cost was associated with it? \$

Did you have brand-signs from producers in your shop 1986-1992? YES NO

Who provided and paid for these?

12. Have there been any differences in the market place 1986-1992 from your point of view as a retailer?

YES NO

13. If yes, what are these? _____

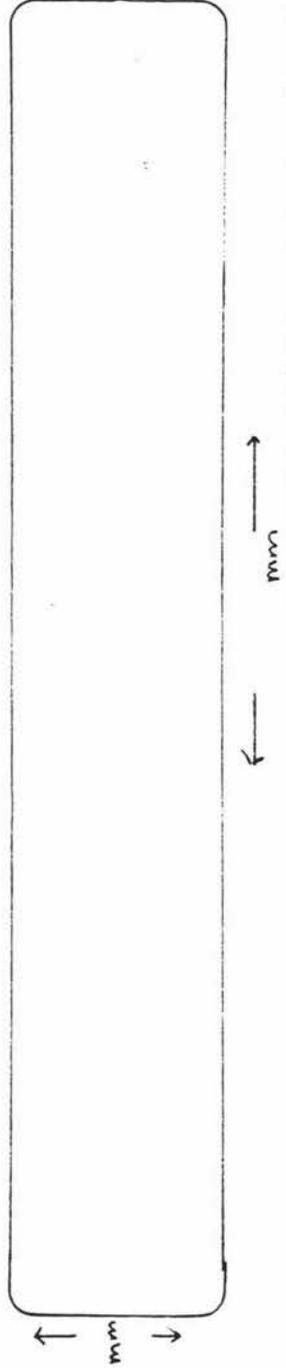
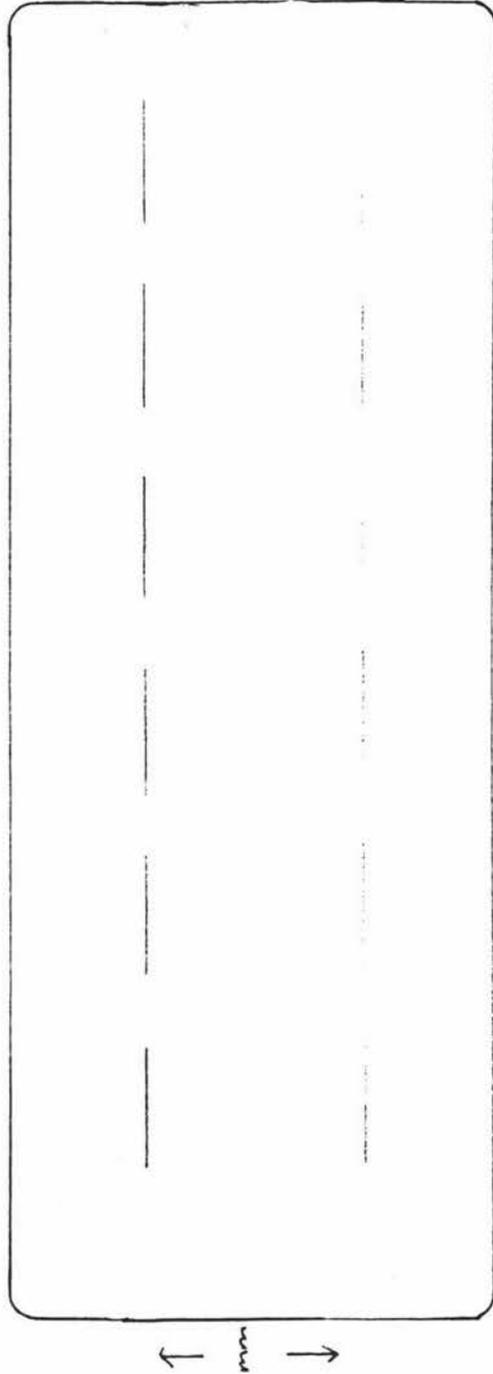
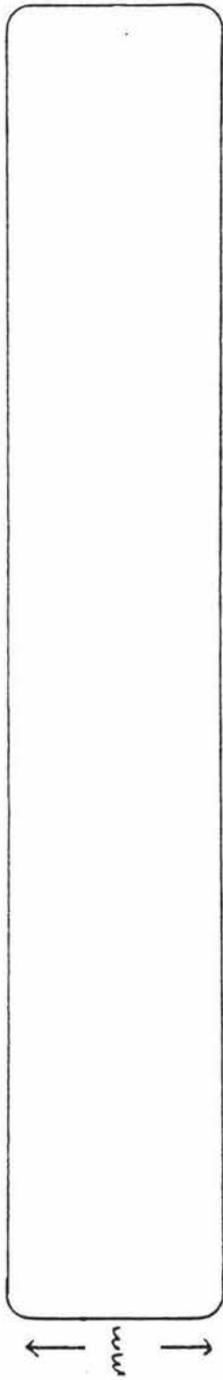
APPENDIX FOUR

POINT OF SALE INFORMATION

BACK
OF
LID

TOP
OF
LID

FRONT
OF
LID



(reduced size)

**LETTER HEIGHT AND WIDTH SHEET
TO ACCOMPANY THE EGG BOX PICTURE**

Brand _____

Colour of Box _____

Diameters of Box: L: _____
W: _____
H: _____

Colour of Eggs: Brown White Mixed

Size of Eggs (as per packet): _____

- | | | | |
|-----|----------|----------|---------------|
| 1. | H: _____ | W: _____ | Colour: _____ |
| 2. | H: _____ | W: _____ | Colour: _____ |
| 3. | H: _____ | W: _____ | Colour: _____ |
| 4. | H: _____ | W: _____ | Colour: _____ |
| 5. | H: _____ | W: _____ | Colour: _____ |
| 6. | H: _____ | W: _____ | Colour: _____ |
| 7. | H: _____ | W: _____ | Colour: _____ |
| 8. | H: _____ | W: _____ | Colour: _____ |
| 9. | H: _____ | W: _____ | Colour: _____ |
| 10. | H: _____ | W: _____ | Colour: _____ |
| 11. | H: _____ | W: _____ | Colour: _____ |
| 12. | H: _____ | W: _____ | Colour: _____ |
| 13. | H: _____ | W: _____ | Colour: _____ |
| 14. | H: _____ | W: _____ | Colour: _____ |
| 15. | H: _____ | W: _____ | Colour: _____ |

INFORMATION IN STORE

Is there a sign relating to the eggs? Y N

What size is it? H: _____ W: _____

What is printed/written on it: (Cross out one)

- | | | |
|-------|----|----|
| 1. H: | W: | C: |
| 2. H: | W: | C: |
| 3. H: | W: | C: |
| 4. H: | W: | C: |
| 5. H: | W: | C: |
| 6. H: | W: | C: |
| 7. H: | W: | C: |
| 8. H: | W: | C: |

What colour is the sign: _____

Is the sign laminated? Y N

What position is the sign in relation to the eggs:

ABOVE EGGS

BELOW EGGS

BETWEEN SHELVES

What height, from the floor is the sign? (IE Floor to top of sign): _____

In what are the eggs displayed: _____

What measurements does it have: H: _____
W: _____

Colour: _____

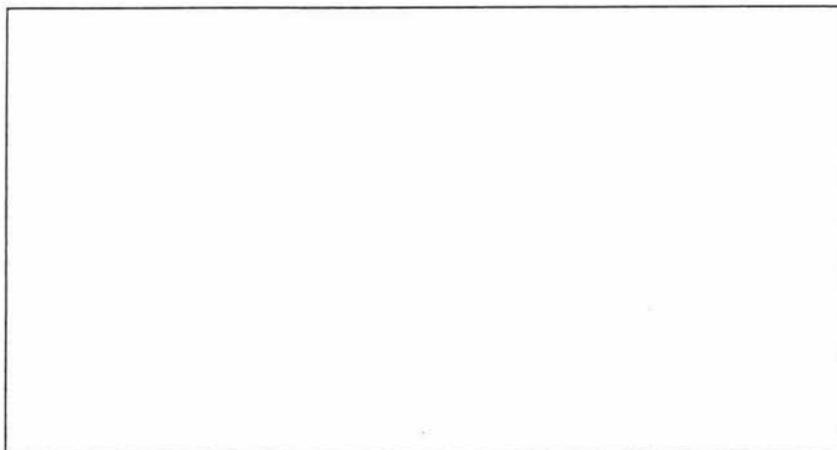
Is there a brand sign associated with the display? Y N

What is it? _____

What size is the sign? H: W:

What colour(s) is the sign: _____

What does it say:



1. H: W: C:

2. H: W: C:

3. H: W: C:

4. H: W: C:

5. H: W: C:

In the case of pictures, the widest height and width shall be recorded and a circle constructed from this.

Other information:

APPENDIX FIVE IN-STORE SIGN ANALYSIS

Supermarkets/Grocers Signs

The smallest sign located in these outlets was 25mm high by 100mm wide; the highest sign was 460mm high (and 360mm wide), and the widest sign was 395mm (and 310mm high). The median height of all the signs in this retail category was 220mm high (by 112mm wide), and the median width was 190mm (by 60mm high).

All signs were on cardboard, in twenty-two cases it was white, and the remaining signs were on yellow. Only two stores had laminated signs. Hand-written information was common to all signs, even the three outlets who used signs with printed store names or logos. In one store, six of their signs had printed information, although hand-writing had been used to alter the printed sign.

The headings of the eggs were generic, unless free range eggs were specifically sold, which occurred in only four outlets. Generic headings located included: 'EGG PRICES' and 'EGGS' (these two were the most common); 'EGGS No. X'; 'FARM FRESH SIZE 6 EGGS DOZEN' (the longest heading found).

Of the free range eggs, only three had signs with them. One white sign written in black, had one word per line on a forty-five degree angle, and read: 'FREE RANGE EGGS', followed by quantities and prices. Another sign was yellow with the shop name, brand name and 'FREE RANGE EGGS' written on it, again followed by the price and quantity. The final sign was a producer's sign, which is discussed in section 5.3.2. Three outlets favoured black writing or printing on white or yellow backgrounds on their signs. Other outlets used black ink for quantity and red for prices, so the two pieces of information were separated. Two signs were found where blue ink, and in the other case, orange/red ink had been used to show the prices and quantities.

The size of the writing and printing depending upon the size of the sign and the amount information retailers wished to communicate to consumers. Giving the various sizes of the writing is misleading, because some retailers put more or less information

on the signs than others. For example, some outlets who had one wire rack or one shelf for eggs used one sign to state the price and relevant quantity eggs were sold at. Larger outlets, with greater volumes being sold, were able to have a separate display unit or large space for every type of egg and a single sign.

In terms of the information presented to the consumer, all but three stores gave prices and quantities equal weighting in terms of their sizes on the sign although different colours were used to highlight the two aspects. Only three stores made price over twice the size of quantity words.

Of the twenty-eight signs found in these shops, sixteen were above the eggs, seven were below, one was behind and another was beside the eggs. Three signs were between shelves of eggs. The median height the signs were placed at was 1.820 metres, whilst the lowest was on the floor ground, and the highest was 1.920 metres. The sign found on the floor may be considered an outlier, because the next height up is 1.092 metres. This does not alter the median range because of the large number of signs some outlets had. However, it does mean that most signs were at least waist height for many consumers, if not higher.

In these outlets, eggs were usually found either in wire racks, provided by the producer or wholesaler, or on a shelf. Three retailers kept their eggs on the shelf, six outlets used wired racks to display their eggs, (two of whom also used a hutch), and three retailers kept eggs on top of the freezer, or in the refrigerator or on the floor. Three outlets had more than one egg display. Two used a hutch as well as wire racks, and the other used a wire-rack and a shelf. In only one case were wire racks found to be in an open refrigerator.

Of the retailers who sold their eggs from the shelf, one kept both branded and loose eggs by baking items, another located loose 'free-range' eggs with the produce, on the other side of the shop from the battery eggs. The third retailer's eggs were located in an alcove beside the counter with the confectionary. The branded and packaged eggs were in a yellow plastic basket and loose eggs were pre-bagged, sitting on the shelf. This retailer's eggs were difficult to find and access.

Two retail outlets sold their branded eggs from wire racks by the bread display. Another two retailers located their racks by the produce, and sold both packaged and loose eggs together. The other two retailers situated their wire cages with at least four different products: plants, meat, wine, and health food, and sold only branded eggs from the cages. In all of these cases however, the egg display was clearly located, so a customer would be likely to see it as they were shopping.

As with the wire-rack locations, the hutches, are at the back of the shop, near areas which most consumers will go to or at least pass by on their way through the store when shopping. Therefore, it is reasonable to assume that the displays will be seen easily.

Branding Signs

Of the eleven stores visited, five had signs which featured the branded eggs they sold. Two other retailers had been given signs to use advertising *Little Red Hen* eggs, but the signs were too big and so consequently were not used.

One of the outlets, as was mentioned above, used the top of a packet to advertise the All-Grain type of egg. Another outlet which sold free-range eggs on a hutch was discussed in section 5.3.1. The packaging is illustrated on pages 95.

Two of the remaining retailers had one sign each, one of which was there when the business was bought and the other given to the retailer in the period under investigation. The first sign is 245mm high by 700mm wide, and shows its age through the statement: 'Little Red Hen is coming'. The banner is predominately yellow, and has a character similar to the NZPB 'Egbert' of the early 1980s, dressed with an apron and a chef's hat. This character stands 210mm by 235mm, representing a brown egg. The brand name is in red, and has its logo, a red hen, beside it. At 50mm by 440mm, it is the largest part of the poster. The other two words ('Is Coming') are in black and excluding the two capital letters is 45mm by 230mm.

The banner was located behind the eggs, but fell down when the researcher was measuring it, due to old cellotape. The poster reinforces the brand name for the eggs, and uses a character which at the time, people may or may not have remembered. However, in terms of the marketplace now, the sign gives no additional information to the packet of eggs.

The other poster is 620mm by 405mm, and is divided into three parts. There is one block of cream and then red, each measuring 105mm by 355mm; followed by one block of black, measuring 324mm by 359mm. Over the cream and red blocks is the little red hen logo and an open packet of eggs. The logo is red and white, the eggs white with black edges. The poster is located above the egg display, with a hand made sign noting quantities and prices cellotaped on to the black portion.

This poster is the same as two located in the third retail outlet, but there they are sandwiched between the wire racks, which stand in a three by two formation, back to back. The researcher located them by kneeling down and peering behind the wire racks, and were therefore invisible to many consumers who passed by.

The brand signs themselves provide information only on the brand and the logo, which would aid recognition if a consumer is faced with their eggs in store (Kotler and Armstrong, 1991). However, no factual information which would add to a consumers knowledge about the eggs is provided by these signs. A consumer would gain more information from the box the eggs are sold in.

DAIRIES

One sign was behind a shop counter and the retailer would not allow the researcher to measure it, and would not measure it for the researcher. Therefore, in terms of measurements the sample was reduced to three, although the heading and information on the unmeasured sign was collected.

The three signs vary in their size. The largest is 380mm by 320mm, the next 95mm by 97mm, and finally there are a group of six white stickers, 28mm by 55mm. The latter two retail signs were located below the eggs, the former sign was above the eggs. The two larger signs were headed 'EGG PRICES' and 'EGGS!' respectively, with the headings or quantity information being larger than the size of the price. Only the larger sign used different coloured ink to differentiate price (in red) from quantity (in blue) on the yellow sign. The other signs were all white with black writing on them. All signs gave only quantity and price information. One outlet sold only loose eggs, another sold both loose and packaged and the remaining two outlets sold only packaged eggs.

The largest sign was situated 1.6 metres off the floor, and the eggs were above the

open freezer next to meat and dairy food, at the far right-hand side of the outlet. The medium sized sign was 1.370 metres above the floor, with the eggs covering a whole top shelf, with flour and other baking requirements to one side. The eggs were on the first shelf a consumer would come to when they entered the store. Despite this however, the retailers said that people still failed to see the eggs, as he stacked the packets with their ends flush with the shelf. The reason given for this was to limit breakages and to fit more eggs on the shelf. The shop with the small signs located their eggs next to the counter, beside the confectionary and a refrigerator selling meat and dairy food.

It is debatable whether the eggs that were sold in the dairies as free-range are raised as free-range if people consider eggs fresh from the farm 'free-range'. However, what is intriguing is that both the retailers and their consumers (given the eggs are sold) require no further confirmation from the producer. From a retailer point of view this is understandable if they visit the farm and believe they are purchasing a free-range egg because it is from a farm. From a consumer point of view it is interesting because they are offered, in dairies, no information labelling the eggs as free-range. All advertising of eggs is generic, and only one store which considers itself to stock free-range eggs has a sign, which is also generic.

One further issue which is raised by this research is that the producers spoken to did not produce free-range eggs until 1990, although some retailers purchased then in 1988 and 1989. It may be that the producers have since left the industry, but the trend in the marketplace was for very little free-range egg production prior to 1990. People either bought from backyard producers or brought the eggs in from another part of the country.

SERVICE STATIONS

All three outlets had similar sized signs, approximately 20mm high by 60mm wide. The signs were white stickers with black printing on them and were attached to the door of the display unit at the shelf the eggs were on.

Two of the signs said 'EGGS SIZE 6', with a sku number located underneath. The egg title was 3mm by 25mm with price the same height but only 9mm wide. The sign

was set out so that the information was separate, egg size on the left and egg price on the right, although no aspect of the sign was more prominent than another. The third sign was black plastic slotted in a metal frame, with white printing and of a similar size as the two signs above. The only information given was the price, in numbers 16mm high and 32mm wide.

Therefore the information communicated to the consumers in two out of three cases was that the product was a certain sized egg, and in all cases, what price the consumer could expect to pay for them.

Two of the outlets kept their eggs in clear, five-doored refrigerators, next to dairy food such as butter and cheese. The eggs were located approximately 1.2 to 1.5 metres off the ground, but because of the size of the unit, low volume on display and smallness of the sign, they were still difficult to locate. The other two outlets kept their eggs at room temperature on a shelf in the grocer section of the outlet. One outlet had the eggs on two shelves 250mm and 500mm off the ground, next to baking items such as sugar and flour. The fourth outlet also located eggs on the shelf, 300mm off the ground, next to toiletry and bathroom items. In both instances, this positioning required the consumer to walk in between the aisles to find the eggs.

Therefore, the positioning of the items did not appear to be made to increase sales or have consumers aware that eggs were sold. This is not surprising given the low levels of eggs that the service stations bought and sold over the period under review. The signs relating to eggs give the information expected of a search good: factual and immediate. A consumer who expects a service station to sell eggs will be directed to them, and in most cases, will be able to ascertain the size and price of the eggs at the point of location.

BUTCHERS

The latter store had two trays of brown eggs behind the counter on a stainless steel shelf, with rolls of petfood on either side. The eggs did not stand out upon entry to the shop, although they were over 1.5 metres off the ground.

The signs in the other three shops were all of different sizes, unlike the service stations. The smallest sign was 65mm by 51mm; the largest 205mm by 148mm. One of the signs had only the shop name printed on it, and was cellotaped below the two orange plastic containers situated on the counter. In this instance it was clear that there were eggs for sale and the average customer could not miss them as they entered the shop. While standing at the counter they were at waist height (just over one metre off the floor), situated by the cash register (which every customer would eventually be near) and flush with the customer side of the counter. Information on price would be available from the person serving, so no price signs were given.

Of the other two shops, one had two signs, which related to a current special. All three signs were white cardboard, with a yellow background in the shop with two signs, and with green edges in the other shop. In each instance, prices were written in black, although other colours (such as red and green) were used for underlining headings or sizes. The shop with two signs used larger writing than the other outlet, even accounting for the differences in sign size.

The outlet with two signs had an 'everyday' sign, headed 'LOOSE EGGS', and the other sign headed 'SUPER SPECIAL', noting 'WHILE STOCKS LAST' at the bottom. Interestingly, the other outlet used a sign with a printed banner on a forty-five degree angle saying 'SPECIAL', (which they were not) with 'EGGS' written below it.

The outlet with two signs had one above the two wire racks and another to one side, with the eggs situated by the cured meats refrigerator. The other outlet had the eggs on the counter by the register, with the sign cellotaped below. In both instances the eggs were located close to the entrance, so a customer see the eggs when they entered the shop and be able to ascertain the prices and available sizes.

FRUITERERS

The sizes varied, the smallest being 295mm by 200mm, and the largest 440mm by 1120mm. The shapes varied here, unlike the other categories which were rectangular shapes. There were two square signs, one long rectangular sign and one shaped like a headstone.

The headings on the signs all had 'EGGS', although one stipulated 'FARM EGGS' and another 'FARM FRESH EGGS'. All signs then listed the quantities (tray, dozen or half dozen) and the relevant prices of these, with only one sign allowing for single eggs to be bought. The size of the writing does not appear to have made a significant attempt to make either aspect stand out over the other; the information is essentially given with equal emphasis. Aside from the two titles only prices and quantities are given, which fits the category of a search good. Two of the signs were located behind the eggs, but were still clear and large enough to be seen, and the other two signs were located above the eggs.

The locations of the eggs varied, with two shops holding the eggs at the counter, both 1 to 1.4 metres off the ground. However, in one instance they were to the side away from the entrance, although they were easily seen when standing at the counter. In the other shop they were behind the counter to the left of the cash register. The person spoken with volunteered the information that while this was not ideal in terms of customers seeing the eggs, it enabled staff to bag eggs when they had little else to do.

The other two shops had the eggs attractively displayed, one using a brightly painted barrow over 1.8 meters wide and 1.9 metres high. The egg sign was 1.4 metres off the ground, with the trays of eggs nestled in straw and a black wooden hen 'eating' to one side of them. The other outlet used a similar idea, with a window counter used to display the trays of eggs, again in straw, and other fruit arranged around them.

SUMMARY

Of the thirty-six retailers visited, twenty-two had signs with their eggs. This produced a total of forty in-store signs located by the researcher, but only five of these retailers, in the supermarket/grocer category, used producer brand signs. In twenty-one cases, eggs were named generically, giving quantity and price information below the heading. Both aspects of the information were usually of equal size, relative to the sign, although in several cases different coloured inks were used to highlight the different quantities and prices. Only two stores had signs up denoting free-range as separate from 'eggs' in general. Only two of the five branding signs found gave information relating

to the eggs, in both cases the types of eggs and the animal husbandry method used.

Therefore, in terms of the advertising literature, the information given for a search good was found to be factual: price and quantity were named. The information specifying the different egg types on signs and displays in retail outlets required the consumers to believe the information presented to them as it was not immediately verifiable.

WIDE CLASSIFIEDS PHONE 75053 **WI**

ACTUAL SIZE **DS** PHONE 75053 **WIDE CLASSI**

WHAT'S ON

Social Club

Notable speakers, displays fashion parades, plus scrumptious supper (refreshment raffle inclusive) are all on the agenda of the Rose City Women's Social Clubs meetings, costing only \$2.50. Visitors welcome.

We meet at Tiffany's at 7.45 p.m. every 3rd Tuesday. Next meeting, Mr Pui Chi Fung from Golden Horse Restaurant will give a demonstration on vegetable and hard sculpture (e.g. water lilies), plus Miss Winslow Harding will talk on food nutrition.

For more information ring Sandra Stuart on 89-868 or Lesley Day on 71-347.

Gymnastics Club

There are still some vacancies in our classes on Wednesday from 4 p.m. to 6 p.m. and Thursdays from 5.15 p.m. to 7.15 p.m. at Q.E.C. Hall.

Milson C.W.I.

Many varied events will be held at the Milson C.W.I. in the Combined Church's Hall, Milson. The Arts and Crafts Circle will meet in the hall on July 9 at 1.45 p.m. and will continue with "Clam Shell Patchwork".

Committee members please note that the monthly meeting will be held on July 14 at 1.45 p.m. A full attendance is requested.

The Floral Art and Garden Circle meet at 52 Kentucky Way on July 30, when members will make presentation cards. Interested ladies cordially invited.

For more information phone B. Gusten on 74-805.

Cloverlea Children

Are you Three in May, June, July, August or September this year? If so, and you would like to meet other children who will be going to the same kindy as you, please phone 72-700.

Lesbians

A social group for lesbians meets every two weeks. If you would like to make contact with other lesbians, write to: Support Group, P.O. Box 509, Palmerston North.

Rape Crisis

Rape Crisis is a group of women who offer emotional, practical and confidential support to any women and children who have experienced at any time rape, incest or sexual abuse. This support also extends to families and close friends.

For more information, phone 65 868 6 p.m. to 6 a.m. Office hours are 10 a.m. to 5 p.m.

Womens Health

The Women's Health Centre is now offering naturopathic treatment and advice, by a third year student on Tuesday afternoons.

For more information, phone 70-314.

Alcohol H-

Alcoholics Anonymous Wednesdays at 7.30 Centre in MacArthur held on Fridays at 11 For more informal

Concert

From the U.S.A., 1st concert for the C.W.C. Church (opposite the Street), on July 19 for graduates of the School of Baptist University. He been involved in church, and started singing following their marriage; vocal and instrument. Joyce Holmes, organist. Joyce will give a Bible Good Life - belonging family.

Soup and savourie conclusion of the program. Programme available at Pharmacy, Broadway at a cost of \$4.

For more information Goss on 84-662.

Kindergarten

Highbury Kindergarten's annual Bride of the Year contest takes place at the Convention Centre on September 16 at 7.45 p.m. This year, we will once again be having a bridesmaid's parade. Entry forms for both brides and maids are available at Thomson's Silk Shop, La Koia Bridal Boutique or the Guardian office.

Tour

For girls aged 13 years and upwards who are interested in touring the beautiful South Island for 15 days from Jan 10 to 24 1987, we have a limited number of seats. For more information phone Margaret Jones on 73-617 or 78-411 after 7 p.m.

Playcentre

Park Road Playcentre offers you and your child a warm, supportive preschool environment. We still have a few vacancies for children aged 2½ - 5. Our sessions run on Monday and Wednesday from 9 to 11 a.m. and on Tuesday and Thursday from 9 to 11.30 a.m. An extended play session for 4 year olds is on Friday, from 9 to 11.30 a.m.

For more information, please ring 71-065.

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For more information, please ring 71-065.

Walkers

During July, the "Weekly Walkers" will be walking on Mondays and Wednesdays at 1.30 p.m. and on Thursdays at 9.30 a.m. A long walk will be held on July 16 at 10 a.m. We meet at the Miniature Railway in the Esplanade. All walkers welcome.

MASSEY FRUIT CROPS UNIT



Open Thursday 8.30 to 4.30 p.m.
Friday 8.00 to 5.00 p.m.
Saturday 9.00 to 1.00 p.m.
Our Season Is Coming To An End

**GRANNY SMITH
BRAEBURN
STURMER
RED DOUGHERTY**

Fresh Farms Eggs
Phone 67-826

MASSEY FRUIT CROPS UNIT



Open Thursday 8.30 to 4.30 p.m.
Friday 8.00 to 5.00 p.m.
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PUBLIC NOTICES

PHOTOCOPIING on the spot service. A4 15c per copy, A3 20c per copy. Crisp clean reproduction on our new Xerox 1025. Guardian office, 481 Main Street, Palmerston North. Phone 75-053.

FIVE-YEAR GUARANTEE FIVE-YEAR GUARANTEE

Are your concrete surfaces slippery and dangerous? Or just plain unslidy? Inquire now about our free no obligation quote on surface shield coatings now operating in the Feilding area. Everlasting, NON-SLIP, seamless, solvent resistant floor coating with minimum maintenance. Colours to suit your decor. Commercial and residential. Ideal for forecourts, garage floors, porches, patios, front and back steps, showroom floors, pool surrounds. Also inquire about our new swimming pool coatings. Add value to your property. Surface shield coatings will keep you on your feet.

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Tok 618

SOUTH ISLAND TOUR

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It's a Camping Holiday
FOR GIRLS ONLY

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Margaret on 73-617 or 78-411

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CHINESE FOOD

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Chow Mein
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Egg Foo Young
Won Ton
Sweet 'n' Sour Pork
Fish and Chips

MANAWATU PEACE MOVEMENT

GUEST SPEAKER
Mrs Pauline Tangiora
President Ikaroa Maori Women's Welfare League
Quaker Meeting House
College Street, Palmerston North
July 9th 7.30 p.m.

SKIING WEEKEND

Girls aged 13 upwards wishing to go skiing for the weekend from September 19 to 21st. Stay at the Outdoor Pursuit Centre. For more information, phone Margaret Jones on 73-617 or 78-411 after 7 p.m.

Published by the PN Newspapers Ltd at its registered office, 481 Main Street, PO Box 1863, Palmerston North and printed by Wanganui Newspapers Ltd, 20 Drews Avenue, Wanganui.

The Guardian, Tuesday, July 8, 1986

They call themselves "The Goonies."
The secret caves. The old lighthouse.
The lost map. The treacherous traps.
The hidden treasure. And Sloth...
Join the adventure.

THE GOONIES

A RICHARD DONNER Film

STEVEN SPIELBERG Presents
THE GOONIES
STEVEN SPIELBERG CHRIS COLUMBUS
DAVE GRUSIN STEVEN SPIELBERG
FRANK MARSHALL KATHLEEN KENNEDY
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(Look for the little red van)



RED DELICIOUS

Only **50¢** per kg
While stocks last



Also available - GALA, SPENDOUR, BRAEBURN, GRANNY SMITHS, GOLDEN DELICIOUS STURMER and a full range of Fresh Vegetables, Eggs & Honey.

OPEN 7 DAYS 9.30 am - 5.30 pm

Prevention is the key word

Perhaps the most noticeable feature of any person's appearance are his or her teeth. Teeth can be a most attractive feature or a real detraction depending on how well they are looked after.

Prevention is the key word to making teeth last a lifetime. Regular preventive care can help achieve this and a lifetime without toothache or other dental discomforts.

One problem with dental care and advice is that teeth are so personal and friends may find it difficult to tell someone that they have a problem with bad breath or their teeth could be improved.

These problems could be prevented by a few simple steps.

Regular dentist visits, plus brushing twice daily with a soft to medium toothbrush and fluoride toothpaste, and once daily dental flossing, is all it takes. If you are worried you have a real problem with bad breath, then a regular mouthwash should solve it.

The trick is to brush and floss correctly, and to know why it is necessary.

The earliest signs of gum disease is noticeable at the gum margins. This area bleeds easily when brushed and sometimes looks swollen and red.

Receding gums and a persistent bad taste in the mouth are signs of gum disease.

Older people may first notice gum disease when a tooth becomes loose or teeth start moving.

Removing the plaque is the key to preventing gum disease.

Careful daily brushing, with a soft to medium brush removes bacterial film and food particles from the inner, outer and biting surfaces of the teeth.

Soft brushes are recommended because they don't damage the gums or wear grooves in tooth enamel. Hard brushes can.

But, toothbrushes cannot remove plaque from between teeth, or in grooves in the biting surfaces of back teeth.

The use of dental floss helps to protect these between-the-teeth sites. However, like brushing, it is important that it's done correctly.

Brushing also needs a firm, but not harsh, hand. The brush should be firmly pushed against the area where the teeth joins the gum and rolled down the teeth.

ACTUAL SIZE

RUAHINE HOSPITAL STORE

77 Ruahine Street, Palmerston North
Phone 84-5

Open 7 Days 6.30 - 8.30

Monday - Sunday

HOT FOODS FR

BREAD ROLLS ON

GIFTS & FLOWERS

VIDEOS \$3 ea TO HIRE

'FRIENDLY SERVICE' VOUCHERS

"We support Dentists"

Proprietors: Tom & Barb



CLOVERLEA ORCHARD

Cloverlea Road, P.N.

Ph 83-986

HUARAU ORCHARD

Napier Road, P.N.

Ph 74-387

(Look for the little red van)



RED DELICIOUS

Only **50¢** per kg
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Also available - GALA, SPENDOUR, BRAEBURN, GRANNY SMITHS, GOLDEN DELICIOUS STURMER and a full range of Fresh Vegetables, Eggs & Honey.

OPEN 7 DAYS 9.30 am - 5.30 pm

Steak \$9.00 kg

Lean Topside Mince \$6.20 kg

Prime Rib Beef Roast \$5.90 kg

All available at
A.E. Preston & Co Ltd.
80 Cuba Street,
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Phone 61-622

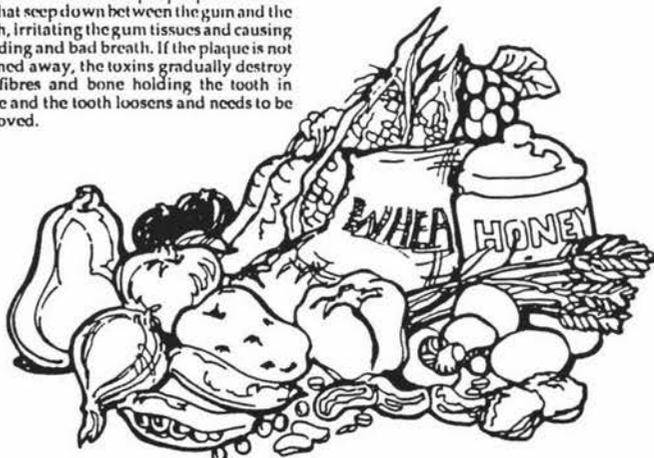
and then polishing the teeth.

GUM DISEASE

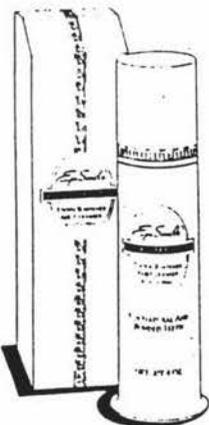
Plaque also causes gum disease by accumulating on the teeth at the gum line.

Certain bacteria in plaque produce toxins that seep down between the gum and the tooth, irritating the gum tissues and causing bleeding and bad breath. If the plaque is not cleaned away, the toxins gradually destroy the fibres and bone holding the tooth in place and the tooth loosens and needs to be removed.

Home care is a large contributor to dental health, but it is the dentist visits that can halt serious decay or gum disease problems, and offer advice needed to properly care for teeth.



EpiSmile



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FOR THE WHITENESS YOU CAN MEASURE

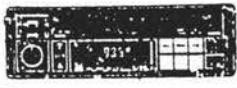
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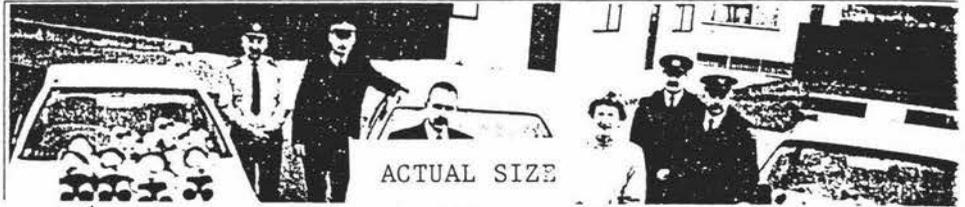
VOL 20 - No 20

Registered G.P.O. Headquarters, Wellington

Wednesday, May 27, 1992

Extra Copies

Bears given to Victim Support Group



Supp Group

Palmerston North Victim Support Group last week accepted 288 bears from Farmers.

The bears were part of a total of 2500 donated to over 40 Victim Support

Top Business

Students and teachers will hear a top line up of speakers at the second Manawatu Business Week in September. Speakers include Sir Robert Jones, Gary

FRUIT TOWN **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN**

BANANAS \$1.99 kg	Rua POTATOES \$4.50 20 kg
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FRUIT TOWN **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN**

Queen's Weekend Deadlines

Due to the Queen's Birthday Weekend holiday deadlines for Classified advertisements and What's on in the Community will be Thursday, May 28, at 5p.m.

strict secondary students and teachers to the world of business. "The aim is to provide learning in a challenging and stimulating environment," organising committee member Annette King said at

as mentors and had to run a business manufacturing transistor radios. Each day they had to make business decisions to cope with changing conditions and the

Continued on page 2

houses, institutions, restaurants, sports club rooms and trans- identify 50 orga The objective of Continued on p

Inside this issue

Window Treatments	P14-15
Winter Comfort '92	P16-20
School Trustee Elections	P25

DISCOUNT WAREHOUSE

Featuring This Week

Crucci Tussock

100 gram Balls. Retail \$8.95
5 fashion colours

OUR PRICE \$7.95

knit 'n save



Hours: Mon - Fri 9.30 - 5 pm
Sat 9.30 - 12.30 pm

345 Ferguson Street, Palmerston North
Tel: 356-8974

OPEN TO ALL KNITTERS

FRUIT TOWN **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN**

BANANAS \$1.99 kg	Rua POTATOES \$4.50 20 kg
OHAKUNE CARROTS 95c 3 kg bag	Farm EGGS \$5.95 Tray

fruit town *Fresh As!*

100% money back guarantee

INDEPENDENT greengrocers

Cnr RANGITIKEI & BENNETT Ph 357-4447 Cnr FEATHERSTON & WARD Ph 359-3264 Cnr CHURCH & RUAHINE Ph 355-5589

FRUIT TOWN **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN** **FRUIT TOWN**

Local News



Compare our everyday low prices
SAVE SAVE SAVE!!
\$\$\$\$

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Compare our everyday low prices
SAVE SAVE SAVE!!
\$\$\$\$

PANDORA

30 SAVELOY'S \$8.50 PKT	
MEAT FOR A WEEK PACKS \$18.50	10 CRUMBED SAUSAGES \$3.95
SIZE 5 LOOSE EGGS \$1.50 DOZ OR \$3.50 TRAY	MEATY NECK CHOPS \$2.25 KG
3KG TOTAL PET ROLLS \$3.25 EA OR 5 FOR \$15.95	

MON-FRI 8.30am-6pm, SAT 8.30am-2pm

Warehouse MEATS
12 BENNETT STREET (Over the Ramp) PALMERSTON NORTH. PH 353-3089

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BLINDS

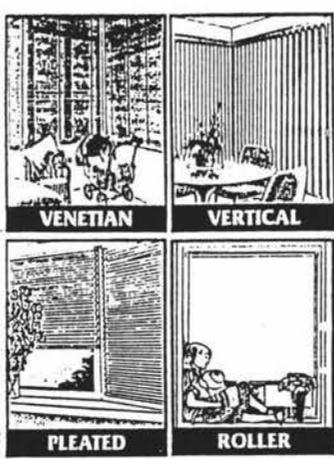
Direct from the factory

Try our new prices!
Try our quality!
Try our service!
You will not be disappointed!

Free measure and quote



FREE BLINDS*
*Special Conditions Apply



SHOWROOM NOW OPEN

- We manufacture Micro Blinds, Roller Blinds, Vertical Blinds, Venetian Blinds, Pleated Blinds
- We are competitive because we market direct to the public.
- We now manufacture the majority of our own components for our blinds.
- So "BUY NEW ZEALAND MADE" from Window Treatments NZ Ltd

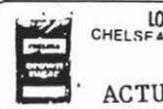
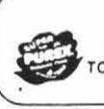
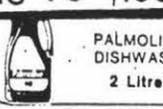
82-84 FITZHERBERT AVENUE
(opposite Movie World)
PALMERSTON NORTH

PHONE (06) 358 6852

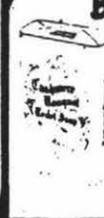


Stylish Blinds from WINDOW TREATMENTS

NEW WORLD SUPERMARKETS

 BUTTER 500g 1.44	 EGGS 6s 1.92	 CHELSEA WHITE SUGAR 1.5kg 1.18	 GREGGS RED RIBBON INSTANT COFFEE REFILL 100g 3.08	 DOLE PINEAPPLE CHUNKS 439g 1.28	 EGGS 6s 1.92	 BONPACK COCONUT 250g .82	 CEREBOS SALAD MIX 275ml 3.23	 PUREX SUPER 4s TOILET TISSUE 2.02	 WET ONES 70s 3.86	 PALMOLIVE DISHWASH 2 Litre 4.14	 PEA BEAU FLY KILLER 335ml 2.53
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CONSISTENTLY LOWER EVERYDAY PRICES

BONUS BUY  NEW AMERICAN CHOCO MAGIC 200ml 2.17	BONUS BUY  TASTI TREATS 250g 2.29	BONUS BUY  FAGGS VITAGRAIN RICE 500g 1.59	BONUS BUY  WATTIES SPAGHETTI 220g .50 <small>SPAGHETTI 820g 1.48</small>	BONUS BUY  KELLOGGS RICE BUBBLES 300g 1.38	BONUS BUY  HOMESTYLE BIG BREAD Medium/Toast Loaf 1.10 CENTS OFF
BONUS BUY  BONPACK BREADCRUMBS 1kg 1.61	BONUS BUY  LOS ANDES GHERKINS SLICED/WHOLE 400g 2.13 <small>ONIONS 400g BROWN/WHITE 1.84</small>	BONUS BUY  OAK SLICED BEETROOT 425g .75	BONUS BUY  WATTIES TOMATO JUICE 425ml .74	BONUS BUY  WATTIES MINTED PEAS 750g 1.48	BONUS BUY  WATTIES STIR FRY VEGETABLE 500g 1.51
BONUS BUY  IRVIN'S MINCE PLATE PIES 450g 1.87	BONUS BUY  BELLAMY'S PASTRY FLAKY/CRUSTY 400g .95 <small>SWEET PASTRY 400g 1.03</small>	BONUS BUY  GOLDEN COAST CHICKEN CHINESE STYLE 5 SPICE 5.42	BONUS BUY  FIDO DOG FOOD 425g .69	BONUS BUY  TOTAL PET FOOD/HIGH ENERGY DOG FOOD 2kg 2.21	BONUS BUY  PEARS FAMILY SHAMPOO MILD/HERBAL/CREAMY 400ml 2.38
BONUS BUY  REXONA DEODORANT ROLL ON 60ml 2.62 <small>AEROSOL 140g 3.68</small>	BONUS BUY  BIC QUIC STANDARD SHAVERS card of 4 .94	BONUS BUY  CASHMERE BOUQUET SOAP 4.8	BONUS BUY  SIGNAL TOOTHPASTE 100g/80g 1.18	BONUS BUY  ELASTOPLAST DRESSING STRIPS 50s 1.95 <small>DRESSING STRIPS 2.19 65mm x 1m DRESSING PLASTERS 1.95 24s</small>	BONUS BUY  CHARCO PRE-WASH STAIN DISSOLVER AEROSOL 335ml 3.66

BONUS BUY  SHELL NETWORK TRIGGER SHARP SHOOTER 500ml 4.87	BONUS BUY  FRESHA PLASTIC BAGS 30s/18s/10s .82	BONUS BUY  EVEREADY SHD BLISTER PACK 1215(4 Pack) 2.22 <small>1235 (2Pack) 1.52 1250 (2Pack) 1.85</small>	LATE NIGHTS FOR THIS WAITANGI DAY WEEK <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>WEDNESDAY</th> <th>FRIDAY</th> </tr> </thead> <tbody> <tr> <td>MARTON</td> <td>until 8.00</td> <td>until 5.30</td> </tr> <tr> <td>Dave's New World</td> <td>until 8.00</td> <td>until 6.00</td> </tr> <tr> <td>FEILDING</td> <td>until 8.00</td> <td>until 6.00</td> </tr> <tr> <td>Dalgety Crown New World</td> <td>until 8.00</td> <td>until 6.00</td> </tr> <tr> <td>PALMERSTON NORTH</td> <td>until 8.30</td> <td>until 7.00</td> </tr> <tr> <td>Pioneer New World</td> <td>until 8.30</td> <td>until 7.00</td> </tr> <tr> <td>Melody's New World</td> <td>until 8.30</td> <td>until 7.00</td> </tr> <tr> <td>BULLS</td> <td>until 8.00</td> <td></td> </tr> <tr> <td>Scaddens New World</td> <td>until 8.00</td> <td></td> </tr> </tbody> </table>		WEDNESDAY	FRIDAY	MARTON	until 8.00	until 5.30	Dave's New World	until 8.00	until 6.00	FEILDING	until 8.00	until 6.00	Dalgety Crown New World	until 8.00	until 6.00	PALMERSTON NORTH	until 8.30	until 7.00	Pioneer New World	until 8.30	until 7.00	Melody's New World	until 8.30	until 7.00	BULLS	until 8.00		Scaddens New World	until 8.00		LOWER EVERYDAY PRICES.... BONUS BUYS SUPER DEAL SUPER DEAL PRICE - REFLECTS PER PRICE REDUCTIONS NEGOTIATED WITH MANUFACTURERS USING OUR SUPER PURCHASING POWER. THE PRICE REDUCTIONS WE THEN PASS ON TO YOU IN THE FORM OF SUPER SAVINGS.
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YOU CAN'T BUY BETTER THAN NEW WORLD

Wanted to know available... Quality Timber... Can be used for plant...

POOL TABLE... OL table plus... 2 1/2 ft plus... 2 1/2 ft plus...

DIOTELEPHONES... 12 line... 12 line... 12 line... 12 line...

WINDMILL... 12 ft... 12 ft... 12 ft... 12 ft... 12 ft...

LEAKING... 12 ft... 12 ft... 12 ft... 12 ft... 12 ft...

REBOARD... 12 ft... 12 ft... 12 ft... 12 ft... 12 ft...

ZURK... 12 ft... 12 ft... 12 ft... 12 ft... 12 ft...

BE... 12 ft... 12 ft... 12 ft... 12 ft... 12 ft...

LBOO... 12 ft... 12 ft... 12 ft... 12 ft... 12 ft...

WEDDING... 12 ft... 12 ft... 12 ft... 12 ft... 12 ft...

GARAGE SALES... 12 ft... 12 ft... 12 ft... 12 ft... 12 ft...

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MUSICAL INSTRUMENTS... REAL... PRIVATE SALE... MANGOON PARK...

BUSINESS FOR SALE... LUNNY ANTS... TAKEAWAYS FOR SALE...

GRAZING... HEATING SUPPLIES... FIREWOOD... AVAILABLE... QUALITY...

GARAGE SALES... BASINETTE... CHRISTMAS... CRAFT... WAREHOUSE...

MACHINERY SELL... CLARSON... MITSUBISHI... WAREHOUSE... REAL ESTATE...

REAL ESTATE... Before buying or selling your home... RING US FIRST...

THE LAW SHOP... Ground floor... 2nd floor... 3rd floor...

LOUGHNANS... "We are not too busy just to talk"...

FIXED FEE CONVEYANCING... PALMERSTON NORTH... FIELDING...

MACHINERY SELL... FORD NEW HOLLAND MANAWATU... FIELDAYS...

OPEN HOUSES... OPEN HOUSES... OPEN HOUSES...

First National... Open Home... 17 SANDLANDS STREET, FIELDING...

First National... Open Home... 17 SANDLANDS STREET, FIELDING...

First National... Open Home... 17 SANDLANDS STREET, FIELDING...

PRIVATE SALE... MANGOON PARK... Spacious 4 bedroom with sunroom...

Britten Vanderkolk... BARRISTERS & SOLICITORS... Solicitor... 157 Broadway Avenue...

LEASE... WAREHOUSE... CHARACTER HOME... PRIVATE SALE...

LEASE... CARPARKING AVAILABLE... OPEN HOUSES... OPEN HOUSE...

OPEN HOUSE... Friday 13, Saturday 14, Sunday 15... 11am to 4pm...

OPEN HOUSES... 1-2 Bedroom Townhouses... 4/5 Main Street...

AWAHURI... Property Brokers... FREE range eggs \$6.50/1tray...

PRIVATE SALE... Country retreat... 2 able bedrooms... 1st floor...

GARLINGTON HOMES... SHOWHOMES OPEN THIS WEEKEND... 11am-4pm...

LD MORGAN REAL ESTATE... "THAODOUS PLACE" BED & BREAKFAST INCOME... 3/4 ACRE LIFE-STYLE...

LD MORGAN REAL ESTATE... COLYTON ROAD... 1 ACRE (APPROX) SOLE AGENCY... 2/3 ACRE LIFE-STYLE...

LD MORGAN REAL ESTATE... BARNESIDE... 3/4 ACRE... 2/3 ACRE LIFE-STYLE... 18 acres (7.3 ha) situated 11km from Feilding...

LD MORGAN REAL ESTATE... LAZY ACRES... 18 acres (7.3 ha) situated 11km from Feilding... 2/3 ACRE LIFE-STYLE...

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RESIDENTIAL SECTION... FOR SALE... \$9000... In heart part of Manurewa...

PRIVATE SALE... Three 2/3rds farm... 2/3rds farm... 2/3rds farm...

CENTRAL... 12 Hectares... 12 Hectares... 12 Hectares...

BRENDA ROBERTSON... real estate... Midway Plaza Broadway Avenue... Palmerston North... 3555.440...

OPEN HOME... Saturday, November 14, 1992... 3:00-4:30pm...

AUCTION... 4 TRAFALGAR ST... FOXTON BEACH... 192,500...

PHILIP MURPHY... Office (06) 366-2889... Phone (06) 363-7804...

OPEN HOMES... 36 BURNS AVENUE... 1117,000... SATURDAY, NOVEMBER 14... 12.30-2.00pm...

RURAL LAND... LIFE STYLE... 124 acres... 2 miles NE of... 357,963...

PRODUCE... FREE range eggs... 50 Strays... 1061 376-5061...

BIG TOMATO... NAPIER ROAD... THURSDAY-MONDAY... "Assailable Freshness"...

OPEN HOME... 28 ELMIRA AVENUE... 833,000... SATURDAY, NOVEMBER 14... 1.00-2.00pm...

RELIANT REAL ESTATE... 53 Princess St... 356-4848... SATURDAY, NOVEMBER 14... 1.00-2.00pm...

PHONE 357-7775... On The Square, Palmerston North...

ACTUAL SIZE

Eggbert gets Mo-tivated.



Here's a little eggspertise from Eggbert — the eggmo.

Not to be confused with the egnog, (which is classically served hot and contains alcohol), the eggmo is an extremely nutritious egg/milkshake which will fill a gap like no other snack, because it's almost a meal in itself.

Why "eggmo"? Because when you drink it, you're left with a frothy white moustache! It's a great hit with kids — even the ones who usually turn up their noses at cooked eggs.

And it's so simple to make, even quite young children can easily be taught how to do it — especially if you have a blender or food processor at hand. Here's how.

The Eggmo

Per person: 1 large egg, 1 glass chilled milk, 1 tsp honey, few drops vanilla or some nutmeg or a piece of fruit, such as a banana, kiwifruit or a few berries.

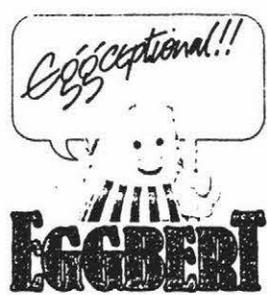
Whisk everything together in a blender or beat it up in a bowl (you will need to puree the fruit first with this method).

This great-tasting, high energy drink contains all ten essential amino acids, vitamins A, B1, B2, B6,

B12, D, E and K (and C if you've added fruit) plus iron, zinc, phosphorous, calcium, sodium, sulphur, potassium, copper, iodine and lecithin.

Everything that growing children need to build and maintain healthy bones and body tissue.

But you don't have to tell the kids an eggmo is good for them — they'll discover the good taste for themselves. Yummo!



New Zealand Poultry Board

Eggbert cracks the case.



Looking for a quick, nutritious lunch? Eggbert's got the answer: baked eggs in tomato cases. They look good, they taste good, they are good — for adults and children alike. Packed with readily usable protein, vitamins and minerals — and if you have a microwave, they'll be ready in five minutes flat. Even in a regular oven, they don't take long. Here's how.

Baked Eggs in Tomato Cases

Per person: 1 large egg, 1 large tomato, grated cheese (optional).

If you are using a regular oven, preheat to 180°C.

Cut a thick slice off the top of each tomato and scoop out the pulp with a spoon — save the pulp for a sauce.

Break an egg into each tomato. Sprinkle with salt, pepper and cheese if liked, and cook until set in oven (10-15 minutes) or microwave on medium power (two minutes per egg).

If you've got a blender or food

processor and you want to add a bit of extra interest to the dish for guests or just a change, try this sauce:

Pulp from tomatoes, ½ onion or 2 spring onions (chopped), 1 can flat anchovy fillets (drained), or 2 tsp drained capers, or ½ cucumber, or 1 ripe avocado, freshly ground pepper, dash of tabasco.

Throw everything in blender or food processor. Process 10 seconds. Drizzle over baked eggs and serve.

Yummo!



New Zealand Poultry Board