THE Q METHOD AND SUBJECTIVE PERCEPTIONS OF FOOD IN THE 1990s

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CONTENTS

LIST OF TABLES (i)
LIST OF FIGURES (iii)
PREFACE (v)
ACKNOWLEDGEMENTS (vii)
SUMMARY (ix)

CHAPTER 1 INTRODUCTION 1

CHAPTER 2 A BRIEF INTRODUCTION TO THE Q METHOD 3

2.1 Introduction 3
2.2 Q and R methods 3
2.3 Q Sorting 5
2.4 Statement and Subject Selection 5
2.5 Q and Subjectivity 6
2.6 Limitations and Weaknesses of Q Method 6

CHAPTER 3 METHOD 9

3.1 Introduction 9
3.2 Statement Selection, Q Sorting, Subjects and Analysis 9

CHAPTER 4 RESULTS AND INTERPRETATION 11

4.1 Introduction 11
4.2 A Three Factor Solution Yielding Four Types 11
4.3 Type A - The Gregarious Gourmet 11
4.4 Type B - The Virtuous Vegetarian 15
4.5 Type C - The Traditional Meat Eater 17
4.6 Type D - The Selective Connoisseur 19

CHAPTER 5 CONCLUSION 21

LIST OF REFERENCES 23

APPENDIX 1 List of Q Sort Statements with Factor Scores. 25
<table>
<thead>
<tr>
<th>TABLE</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Top Ranked Statements by Type</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>Discriminating Statements for Type A</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>Discriminating Statements for Type B</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>Discriminating Statements for Type C</td>
<td>18</td>
</tr>
<tr>
<td>5</td>
<td>Discriminating Statements for Type D</td>
<td>20</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

FIGURE PAGE

1. Subjects by Traits Data Matrix 4
PREFACE

Surveys of food consumers are common in marketing research and they provide valuable information about the target population. In particular, surveys are suitable for establishing the frequency of different types of consumers and for examining relationships between variables. However, at times it is important to focus on consumers' values and to discover and describe the various types of consumer in the population.

In this report, Dr. Fairweather examines people's perceptions of food and describes four basic types of value preference using a technique called the Q method. The emphasis is not on random sampling and variable analysis but on exploratory, qualitative research which allows the subjective perception of food and attendant values to be described using quantitative methods. The results go a considerable way in improving our understanding food consumption in the New Zealand context.

Tony Zwart
DIRECTOR
ACKNOWLEDGEMENTS

The author is grateful for the assistance received from colleagues and staff at Lincoln University, dietitians at Christchurch Hospital, and friends who kindly provided their time to undertake a Q sort.
SUMMARY

Results of a study of people's perception of food are presented. The Q method was used to factor analyse the data from 59 subjects who sorted statements about food. Four types are described and labelled the Gregarious Gourmet, the Virtuous Vegetarian, the Tradition Meat Eater and the Selective Connoisseur. These types account for the main variations in perception of food and each type has a distinctive subjective experience of food. The results have implications for marketing, dietary and nutrition practitioners, and for the sociology of food and eating.
CHAPTER 1

INTRODUCTION

The study of food from a sociological point of view is a relatively new and growing area. Contributors to *The Sociology of Food and Eating* (Murcott, 1983) emphasise the social significance of food and eating, and link food to social organisation, health, gender and household. For example, they examine the meanings associated with meat for both vegetarians and non-vegetarians, and compare Asian and British attitudes to food. While sociologists may be new to this area, there is a longer tradition in anthropology where it has been a basic working assumption that food is a cultural product in addition to being a biochemical source of nutrition. Hence, different cultures attach different meanings to food, and food itself can become a symbol. The anthropological approach is well-illustrated in *Shared Wealth and Symbol: Food, Culture and Society in Oceania and South-East Asia* (Manderson, 1986). While the focus there is on traditional cultures it suggests that similar approaches can be adopted to our own patterns of eating.

An important proposition of the sociological approach to food is to recognise that food has different meanings to different people, even in our own society. Further, it is likely that these meanings will change over time. Taking these points as a starting proposition the research in this report is a preliminary exercise in describing different attitudes to food among some New Zealand people in the 1990s. The emphasis is on the values associated with food and the Q method is first outlined then used to explore contemporary attitudes.

The research reported here is not an in-depth study but a preliminary exploration of food values. There is no review of relevant food literature. The method is described in full but without diversion into methodological issues. The results are preliminary but do have practical implications. The research is valuable in that it introduces to a New Zealand audience a novel approach to the study of subjectivity.
CHAPTER 2

A BRIEF INTRODUCTION TO THE Q METHOD

2.1 Introduction

This chapter reviews the basic steps in Q method and introduces the underlying philosophy. The approach here is to present clearly the main ideas rather than critically evaluate them. The main source is Brown (1980) and the interested reader is directed to this source for amplification on the points discussed below, and to Stephenson (1975). A recent publication not referred to here is McKeown and Thomas's (1988) Q Methodology.

2.2 Q and R Methods

In July 1935 the British factorist Sir Godfrey Thompson advanced the idea of computing correlations between subjects and not between test scores, and described the approach as Q in order to distinguish it from Pearson's r and R analysis. In August, 1935 in a letter to Nature, William Stephenson described a new technique of factor analysis in which the scores of subjects were factored. These two events illustrate parallel developments of an innovation. The Q method had its origins in the statistical and factor analysis development of that time.

The Q method involves subjects placing a selection of objects in a significant order. Typically, statements of opinion are rank-ordered according to a condition of instruction, such as most agree to most disagree. The array of statements is a Q sort. The Q sorts from several people are correlated and factor analysed to yield groups of people who have ordered the statements in a similar way. The order of statements of all the people loading on a factor is used to produce an array typical of all those subjects. Finally, each factor and its corresponding array of statements is examined to advance an interpretation that is consistent with the array.

The Q method emphasises the concept of "operant subjectivity". This concept entails the assumption that all subjective phenomena (i.e., what people value or feel about something) are manifest and reducible to factor structure since there is no right or wrong way to sort the statements. The Q sort is an individual's picture of reality according to him or her. The Q sort reflects the subject's viewpoint and indicates what is important to the subject. The act of Q sorting makes manifest the subjectivity of the subject, hence the subjectivity is operant, or measurable.

Typically, scientific measurement involves comparing the item to be measured with a known standard. When measurement is
applied to people, the researcher establishes criteria (e.g., low income is less than x dollars), takes a measurement (income level) and interprets the results (description of income data). When undertaking this kind of measurement no attention is paid to what the subject thinks of feels about his or her particular income level. In contrast, with Q method attention is focused on the subject and the Q sort provides a way for subjects to express their thoughts and feelings about an issue.

The Q method is different to the typical quantitative approach or the R method as outlined in the above description of scientific measurement. The contrast between the two approaches is important and the fundamentals of the differences between Q and R methods are contained in Figure 1.

**FIGURE 1**

*Subjects by Traits Data Matrix*

<table>
<thead>
<tr>
<th>Traits</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
<th>Tₙ</th>
</tr>
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<tbody>
<tr>
<td>S₁</td>
<td>S₁T₁</td>
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<td>S₁T₃</td>
<td>S₁Tₙ</td>
</tr>
<tr>
<td>S₂</td>
<td>S₂T₁</td>
<td>S₂T₂</td>
<td>S₂T₃</td>
<td>S₂Tₙ</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Sn</td>
<td>T₁</td>
<td>T₂</td>
<td>T₃</td>
<td>Tₙ</td>
</tr>
</tbody>
</table>


Figure 1 shows the scores, $S_i T_j$, for subjects and traits that can be produced when social science research occurs. For a Q sort the Ts represent statements and the row of scores, $S₁ T₁$ to $Sₙ Tₙ$, is the Q sort for $S₁$. In R analysis each trait (or variable) is correlated with each other to produce factors linking selected traits to each other. The analysis is based on differences between all subjects for each trait, and their is no interaction between subjects. R analysis typically would examine each trait or variable and use this data to describe the subjects, or go on to examine sub-groups in terms of selected traits or variables. In Q analysis subjects are correlated with each other to produce factors which link together subjects who have similar scores.
The analysis is based on differences within subjects for each trait, and there are interactions between traits by virtue of the subjectivity of the subject.

2.3 Q Sorting

Subjects can rank order statements or objects, such as photographs, according to what they like/dislike or agree/disagree with. Typically, the statements, for example, are placed in a number of piles to which a score is given, ranging from negative to positive. Each pile has a different frequency of statements so that those at the extreme, with a high score, have few statements and those in the middle, with a low score, have many statements. In this way the Q sort takes the form of a normal curve. The normal curve is used for convenience only because generally there are more statements about which most subjects have no strong opinion. There is no technical reason for using the normal curve.

The statements placed in the middle of the distribution receive a score of zero. Each Q sort is similar in that a number of statements have a zero score and are equally insignificant to all of the subjects. Statements at the extremes are then measured by their score and are important because they do have meaning compared to the middle or neutral statements.

2.4 Statement and Subject Selection

The Q method uses a sample of 30 to 50 statements selected from the population of all possible statements. Typically the sample of statements is stratified or structured to insure that it represents relevant aspects of the population of statements. Relevance is derived from available theory or understandings about the subject matter in question. Occasionally, factorial designs are used. At this stage of selecting a structured sample of statements the researcher is making explicit his or her expectations about what is important. Finally, statements which have maximum diversity are selected and they are expressed in colloquial language.

Subject selection with Q method does not follow standard random sampling procedures. There is no concern with the frequency of different types of people in the population. Typically, enough people are used in order to establish a factor, so that when a minimum of about four people do Q sorts in a similar and distinctive way they can be expressed as one factor. Since the full range of factors is sought it is important to select subjects who are as diverse as possible. Typically, from 20 to 50 subjects are used for the Q sorting, and by selecting diverse subjects it is possible to map out the range of distinctive ways that the statements are given meaning.
2.5 Q and Subjectivity

While the researcher selects statements for Q sorting by the subjects under study, the subjects do the Q sort of all statements. The researcher only influences the selection of raw materials for sorting. Further, the focus of analysis is not the apparent meaning of each isolated statement, but the way all statements are arranged in relation to each other. The relationships inherent in a Q sort are a product of the subject alone. The meaning of statements derives not from the individual appearance of each statement but from their relationships among each other. Precise meanings and nuances of statements derive from the position of the statement in the array.

There are many ways that statements can be sorted. For example, if there are 60 statements in an array of nine piles, with a minimum number of three and a maximum number of ten piles, there are \(2.28 \times 10^7\) ways of sorting. In practice, the factor analysis produces a limited number of common ways of sorting. Usually there are three factors and sometimes up to seven. Not discussed in this paper is the rotation process by which loadings on factors are refined.

The interpretation of each factor requires the development of an explanation which must fit the known facts for that factor. In particular, attention is given to the relationship between statements, and the interpretation proceeds by continuously putting up possible explanations for the factor array until the best explanation is developed. In this way Q method integrates both deductive logic, in the selection of statements, and inductive logic, in the formulation of plausible explanations. Most importantly, in developing plausible explanations the researcher is bringing to light the values of the subjects under study. Subjectivity, made operant by the Q sort, is the quality that is the focus of the research.

2.6 Limitations and Weaknesses of Q Method

Q method does not provide information on the proportion of types in the population. Further, it is oriented to psychological and social psychological phenomena, and not well-suited to social phenomena, in particular structural and historical processes. It is well-suited to studies of non-interacting individuals. Sometimes subjects do not form a distinctive type because their Q sort is idiosyncratic, and sometimes subjects load on more than one factor because they have non-distinctive Q sorts. These cases raise the issue of the distinctiveness of the factors. Finally, the factor analysis entails a rotation phase which introduces both advantages and disadvantages. Centroid factor solutions followed by hand rotation best fits Stephenson's original use of Q method (Stricklin, 1987). However, hand rotation allows
the researcher to produce more than one final factor solution, and the different factor solutions yield variations in interpretations. Such indeterminateness is best handled when the researcher has clear theoretical hunches to pursue and can therefore justify the selection of a particular rotation.
CHAPTER 3

METHOD

3.1 Introduction

This brief chapter contains details relevant to the preparation and execution of the data gathering stage of the study of people's perception of food.

3.2 Statement Selection, Q Sorting, Subjects and Analysis

A Lincoln University marketing class of about 50 students provided statements about food following a lecture on the social aspects of food. Students were asked to write down a statement that expressed their view of food. Suggestions were made to illustrate that the statements could focus on what food they liked or what was their philosophy of food and eating. The usable statements covered seven topics, and other topics were drawn from the literature to give 13 topics as listed below:

1. time (when should one eat)
2. preparation (cooked versus raw)
3. vegetarianism
4. "bad" or junk food
5. changes in nutrition (traditional versus new)
6. health
7. organic food
8. the experience of eating
9. quantity of food, and food as a fuel
10. taste
11. cost
12. allergies and reactions
13. the food industry.

Appendix 1 lists the 59 statements selected for use in Q sorting. About half were from the students and the remainder were added by the author to insure that each topic had at least three statements.

The statements were attached to small cards and provided to people for initial sorting into three preliminary piles: agree, disagree and neutral. The subjects then selected statements from the agree pile, starting with the three statements they most strongly agreed with, to begin filling in a forced distribution. In this distribution there were 11 piles ranging from a score of -5, for strongly disagree to +5 for strongly agree. There were three statements in the end piles and up to nine statements in the middle or neutral pile. This distribution can be displayed as follows:
After working with the statements in the agree pile and filling in from the right hand side as far as possible the subjects selected statements from the disagree pile. Again starting with the three statements they most strongly disagreed with, the subjects began filling in the distribution from the left hand side. Finally, the neutral statements were sorted to select those for which some slight level of agreement or disagreement could be found. Sorted statements were not moved so that the subjects were free to change the position of any card. Q sorting would have been improved if there were fewer statements and with the removal of statements which had more than one main idea. Further, there was a tendency for people to agree with more cards than they disagreed with. While this pattern did not affect the analysis, a greater proportion of statements which would receive a negative score may have helped to contrast the factors.

People selected for Q sorting were a mix of Lincoln University academics, grounds staff, students, and friends. In addition, four dietitians from Christchurch Public Hospital provided Q sorts. A total of 59 people did a Q sort. In selecting subjects every attempt was made to obtain a balance of men and women (25 women and 34 men) and to draw a diverse, non-random sample. All subjects were of European descent and were between the ages of 20 and 50.

The Q sorts were carefully recorded by writing down the number of each card in a scoring sheet. Data from each sheet were entered directly to a personal computer programme, p.c.q., designed for Q analysis. The basic steps in the programme include: data entry, correlation, factoring, rotation, factor scores, and finally the preparation of a study report. The report contains the basic data, plus other presentations which assist in developing an interpretation of each factor.

The key data for interpreting different factors are the factor scores associated with each statement. In this report most attention is given to statements receiving a top score of +5 or -5, and to statements which differentiate between factors by virtue of having a score distinctive to that factor. These scores and their values tell us how the statements are ranked: -5 means strongly disagree and +5 means strongly agree. Only minor attention is given to other statements, which for example, might show high scores for two factors and low or negative scores for the remaining factors. More detailed interpretations than are developed in this study would draw on these other statements. All statements and their factor scores are listed in Appendix 1.
CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

This chapter first briefly comments on the number and type of factors produced from the analysis, and then describes four types of perception of food. Tables are presented to show the factor scores associated with each statement for each type, and these data guide the development of the type interpretations. Some of the statements may appear contradictory to us, but if they received a high score then we can assume that the statements were meaningful to the subjects. The interpretation attempts to explicate the meanings by looking at statements in relationship to each other. While some of the nuances of meaning proposed here may not be accurate, the general features of each type are well-grounded in the data and are not problematic.

4.2 A Three Factor Solution Yielding Four Types

After factor analysis and three rotations there were four factors which had significant loadings of more than 0.45. There were only two significant loadings on the fourth factor, and it was excluded from the interpretation. Out of the total of 59 cases there were five cases where there were confounded loadings, that is, significant loadings on two factors, and 12 cases without a significant loading on any factor. Factor A was derived from 14 Q sorts, Factor B was derived from seven Q sorts and Factor C was derived from 18 Q sorts. Factor B was bipolar; four people were positively aligned to the sentiments of the factor and three people were negatively aligned. For this bipolar factor the focus of attention and the issues of the seven Q sorters are the same but they have opposing views on the issues. Factor B represents two perspectives and in the interpretation that follows there is reference to four types, labelled A, B, C and D. B and C are opposites and derive from the bipolar Factor B, and type D is the original Factor C.

4.3 Type A - The Gregarious Gourmet

Table 1 shows the top-ranked statements for all four types, thus indicating which statements received a score of +5 or -5.
TABLE 1

Top Ranked Statements by Type

<p>| | | | |</p>
<table>
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</thead>
</table>
| 14. Vegetarianism is the way of the future - we can't keep on slaughtering animals for our benefit. | -5 | +5 | -5 | -5
| 15. Non-meat dishes can supply all the nutrients we need. | 0 | +5 | 0 | 0
| 16. Killing animals for our food is barbaric. | -5 | +4 | -4 | -4
| 17. A meal is not a meal without meat. | -4 | -5 | +5 | -3
| 20. The basic NZ diet has served us well - the traditional foods are our best foods. | -3 | -5 | +5 | -2
| 27. Of all people, I am the one most responsible for my health. | +5 | +2 | -2 | +5
| 29. If you are going to get unwell you will - so I eat what I like and enjoy it. | -3 | -4 | +4 | -5
| 35. This organic food issue - it's ridiculous - all food has chemicals in it. | -5 | -3 | +3 | +2
| 37. Eating food is a taste experience - I enjoy the satisfaction of eating a well-prepared meal. | +5 | +1 | -1 | +4
| 39. Food enables people to enjoy the company of friends - a chance to meet and talk. | +5 | +2 | -2 | +4
| 41. Food is basically fuel for life. | +1 | 0 | 0 | +5
| 46. Good food to me is anything that tastes good and that I can eat plenty of. | -2 | -5 | +5 | -4
| 55. All this talk of allergies is half of the problem - just eat good food and you will be OK. | -3 | 0 | 0 | -5
| 58. All processed foods should have complete labelling so I know exactly what's in it. | +3 | +4 | -4 | +5

A B C D
The table shows what issues are important to each of the four types and begins to indicate their key features. For example, scores for statements 14 and 15 show that Type B is interested in vegetarianism. Type A emphasises responsibility for health (statement 27) and the taste of food (statement 37). Type C likes the basic New Zealand diet (statement 20). Type D is similar to Type A but does not see the organic food issue as ridiculous (statement 35) and sees food as fuel for life (statement 41).

In addition to the top ranked statements, it is important to focus on statements which while receiving a score of less than five or four, have that score for that type only. These discriminating statements add depth to the interpretation. Table 2 shows discriminating statements for Type A, where each selected statement has a score of at least plus or minus two compared to all other types. (Later tables have a score difference of three or five, and this reflects the degree of similarity or difference between the types.)

Tables 1 and 2 show that Type A emphasises the conviviality of eating and the taste of food. For these people, food is the means of enjoying the company of friends and provides a chance to meet and talk (39; +5, +2, -2, +4). Eating food is a taste experience and these people enjoy the satisfaction of eating a well-prepared meal (37; +5, +1, -1, +4) and they believe that they are responsible for their health (27; +5, +2, -2, +5). They eat junk food occasionally, believing that it is not going to hurt anybody (25; +3, 0, 0, +1) and food has to taste good otherwise they will not eat it (47; +3, -2, +2, -1). Further, cooking is the expression of personality and a meal is a creation to be enjoyed (6; +3, +1, -1, 0). Hence they enjoy sumptuous food which gives the right atmosphere for the occasion (40; +2, 0, 0, 0).

Type A strongly disagrees with the idea that killing animals for our food is barbaric (16; -5, +5, -5, -4). Nor do they see that vegetarianism is the way of the future and that we have to stop slaughtering animals (14; -5, +5, -5, -5). Also strongly rejected is the idea that the organic movement is flawed because all food has chemicals in it (35; -5, -3, +3, -2). These people do not see food as something that is merely filling (45; -4, 0, 0, -2 and 46; -2, -5, +5, -4). To people who enjoy the social experience of eating and the taste of food it makes little sense to eat merely to postpone the next eating occasion. Neither do they support the idea of carefully choosing their food to ensure good health (26; -1, +3, -3, +1). This type appears not to have any problems with food allergies, saying that they do not have to watch what they eat (53; -4, -1, +1, -2). However, they reject the idea that just eating good food will alleviate allergy problems (55; -3, 0, 0, -5). Perhaps because they do not believe in careful food selection for health, allergies are the result of chance factors rather than inherent in food itself. Or perhaps, since they say they do not experience allergies they
do not believe that controlling food intake will remedy an allergy problem. Finally, this type gives a neutral score of zero to the view that a rare juicy steak is the ideal meat dish (8; 0, -2, +2, -3), perhaps reflecting that their tastes run to more exotic dishes.

### TABLE 2

**Discriminating Statements for Type A**

<table>
<thead>
<tr>
<th>Statement</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Cooking is the expression of personality, and a meal is a creation to be enjoyed.</td>
<td>+3</td>
<td>+1</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>8. Rare juicy steak is my ideal for a great dish.</td>
<td>0</td>
<td>-2</td>
<td>+2</td>
<td>-3</td>
</tr>
<tr>
<td>25. Occasional eating of junk food isn't going to hurt anybody.</td>
<td>+3</td>
<td>0</td>
<td>0</td>
<td>+1</td>
</tr>
<tr>
<td>26. &quot;You are what you eat&quot; -- I choose my food carefully to ensure I have good health.</td>
<td>-1</td>
<td>+3</td>
<td>-3</td>
<td>+1</td>
</tr>
<tr>
<td>40. I enjoy food that is sumptuous and gives the right atmosphere for the occasion.</td>
<td>+2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>45. Good food gets rid of the empty feeling for the longest period of time.</td>
<td>-4</td>
<td>0</td>
<td>0</td>
<td>-2</td>
</tr>
<tr>
<td>47. Food has to taste good no matter how good it is -- otherwise I won't eat it.</td>
<td>+3</td>
<td>-2</td>
<td>+2</td>
<td>-1</td>
</tr>
<tr>
<td>53. I'm finding I have to watch what I eat because of allergic reactions.</td>
<td>-4</td>
<td>-1</td>
<td>+1</td>
<td>-2</td>
</tr>
<tr>
<td>46. Good food to me is anything that tastes good and that I can get plenty of.</td>
<td>-2</td>
<td>-5</td>
<td>+5</td>
<td>-4</td>
</tr>
<tr>
<td>55. All this talk of allergies is half of the problem -- just eat good food and you will be OK.</td>
<td>-3</td>
<td>0</td>
<td>0</td>
<td>-5</td>
</tr>
</tbody>
</table>

**Note:** discriminating statements selected for a difference in factor score of 2 points compared to all other types.
A number of general points about Type A can now be made. The majority of the statements which receive a significant score from Type A express the emphasis given to the taste of food and the social experience of eating. Food is not a moral or health symbol, but the medium of enjoying company and social intercourse by way of pleasant taste experiences. They do not follow vegetarianism nor see food as the source of health, even though they place great emphasis on personal responsibility for health. All kinds of food are eaten, provided it tastes good, and there is no restriction on diet. An appropriate label for this type is the "Gregarious Gourmet". A gourmet is an excellent judge of fine foods and drinks so must have a keen sense of taste and an appreciation of the taste of food. A Gregarious Gourmet thus combines the concern for taste with the social experience of eating as he or she makes food the vehicle for rewarding human interactions.

4.4 Type B – The Virtuous Vegetarian

Tables 1 and 3 show the top ranked statements and discriminating statements for Type B. This group consists of vegetarians who have definite views about the right kind of food to eat. They believe that vegetarianism is the way of the future and that we can not keep on slaughtering animals (14; -5, +5, -5, -5). Non-meat dishes can supply all the nutrients they need (15; 0, +5, 0, 0) and good food is that which is unprocessed and as natural as possible, with low chemical input (36; +1, +4, -4, +2). They also believe that packaged and processed food is one of the major causes of poor diet today (57; -2, +3, -3, 0). However, they find that some sectors of the food industry provide the food they want (33; -1, +2, -2, 0). These people believe that they are responsible for their health (27; +5, +2, -2, +5) but surprisingly they give only modest support to this idea. Perhaps they find it hard to be totally responsible for their health since they have to eat the right food and it is not always available to them.

Type B is similar to Type A in some views. They agree that all processed food should have complete labelling (58; +3, +4, -4, +5) but taste (37; +5, +1, -1, +4) and sociability (39; +5, +2, -2, +4) are not so important as eating the right kind of food, as described above.

At the heart of the vegetarian position is a rejection of the basic New Zealand diet and the idea that traditional foods are the best foods (20; -3, -5, +5, -2 and 22; -1, -4, +4, -1). They also reject the idea that taste is the important factor in food (46; -2, -5, +5, -4) and they are not keen on cooking and the aroma of cooked food (5; +2, -2, +2, +2). Since taste cannot define good food it is important to select one's food to ensure it is appropriate and of good quality. They disagree quite strongly with the idea that quality is unimportant or that food quality is
**TABLE 3**

**Discriminating Statements for Type B**

<table>
<thead>
<tr>
<th>Statement</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Good cooking makes the meal - I enjoy the aroma of cooked food.</td>
<td>+2</td>
<td>-2</td>
<td>+2</td>
<td>+2</td>
</tr>
<tr>
<td>9. Raw is best - why destroy the goodness of food by cooking?</td>
<td>-1</td>
<td>+2</td>
<td>-2</td>
<td>-3</td>
</tr>
<tr>
<td>12. Vegetarians are missing out on some great taste experiences.</td>
<td>0</td>
<td>-3</td>
<td>+3</td>
<td>0</td>
</tr>
<tr>
<td>22. I like traditional farm food like roasts, puddings and good home cooking - people have lived for years without trendy, high fibre, low cholesterol diets.</td>
<td>-1</td>
<td>-4</td>
<td>+4</td>
<td>-1</td>
</tr>
<tr>
<td>27. Of all people, I am the one most responsible for my health.</td>
<td>+5</td>
<td>+2</td>
<td>-2</td>
<td>+5</td>
</tr>
<tr>
<td>30. Many factors go into making up your state of health.</td>
<td>+4</td>
<td>+1</td>
<td>-1</td>
<td>+4</td>
</tr>
<tr>
<td>33. Some sectors of the food industry are providing the kind of food I want - sometimes I have to hunt it out but usually I can get it.</td>
<td>-1</td>
<td>+2</td>
<td>-2</td>
<td>0</td>
</tr>
<tr>
<td>34. Food quality is not such a big deal - for the most part our food is of very good quality.</td>
<td>-1</td>
<td>-4</td>
<td>+4</td>
<td>-1</td>
</tr>
<tr>
<td>36. Good food is what is unprocessed and as natural as possible, with low chemical input.</td>
<td>+1</td>
<td>+4</td>
<td>-4</td>
<td>+2</td>
</tr>
<tr>
<td>37. Eating food is a taste experience - I enjoy the satisfaction of eating a well-prepared meal.</td>
<td>+5</td>
<td>+1</td>
<td>-1</td>
<td>+4</td>
</tr>
<tr>
<td>39. Food enables people to enjoy the company of friends - a chance to meet and talk.</td>
<td>+5</td>
<td>+2</td>
<td>-2</td>
<td>+4</td>
</tr>
<tr>
<td>57. Packaged, processed food is one of the major causes of poor diet today.</td>
<td>-2</td>
<td>+3</td>
<td>-3</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note: discriminating statements selected for a difference in factor score of 3 points compared to all other types.*
good (34; -1, -4, +4, -1). Naturally, this type is defensive about criticism of vegetarianism and does not agree that they are missing out on great taste experiences (12; 0, -3, +3, 0).

In contrast to the Gregarious Gourmet who likes the taste of food, the vegetarians here want to eat the right food, especially if it is non-meat, natural and unprocessed. There is a moral element in the meaning of food and active discrimination in food selection to use the right food. Good food therefore has a virtuous quality and an appropriate name for Type B is "Virtuous Vegetarian" in order to emphasise not the morals of the vegetarian but the moral quality which they attached to food.

4.5 **Type C - The Traditional Meat Eater**

Tables 1 and 4 show the top ranked statements and discriminating statements for Type C. This group consists of people who also have a moral view of food but see traditional foods, including meat, as the right food to eat. Type C is the polar opposite to the Virtuous Vegetarian. People in this category believe strongly that the basic New Zealand diet has served us well (20; -3, -5, +5, -2) and they like anything that tastes good and that they can get plenty of (46; -2, -5, +5, -4). They like all types of food believing that it is all good (11; -3, -4, +4, -3). However, they particularly favour traditional farm food like roasts and puddings (22; -1, -4, +4, -1) and they believe that food quality is not such a big deal and that our food is of very good quality (34; -1, -4, +4, -1). These people are fatalist about their health believing that if you are going to get unwell you will, so they eat what they like and enjoy it (29; -2, -4, +4, -5). Taste is not important (50; -3, -3, +3, -4) and they are reluctant to spend money on health food (51; -4, -3, +3, -2).

Not surprisingly, this traditional approach rejects vegetarianism (14; -5, +5, -5, -5), the idea of a diet based on fresh fruit and vegetables (10; +1, +4, -4, +2), and the need to eat unprocessed food (36; +1, +4, -4, +2). They see little point in defining good food in terms of good health (31; +4, +4, -4, +4), and they see little value in health research (18; +4, +3, -3, +2). In short, this type sees little connection between food and health (28; +2, +3, -3, +2) because of the aforementioned fatalism. Since health is not related to food and the belief that food is of good quality this type is unconcerned about food labelling (58; +3, +4, -4, +5).
**TABLE 4**

**Discriminating Statements for Type C**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Fresh fruit and vegetables are the basis of an ideal diet.</td>
<td>+1</td>
<td>+4</td>
<td>-4</td>
<td>+2</td>
</tr>
<tr>
<td>11. I like all types of food - it's all good for you.</td>
<td>-3</td>
<td>-4</td>
<td>+4</td>
<td>-3</td>
</tr>
<tr>
<td>18. Today it is possible to learn from the health research and avoid salt and cholesterol for example.</td>
<td>+4</td>
<td>+3</td>
<td>-3</td>
<td>+2</td>
</tr>
<tr>
<td>22. I like traditional farm food like roasts, puddings and good home cooking - people have lived for years without trendy high fibre, low cholesterol diets.</td>
<td>-1</td>
<td>-4</td>
<td>+4</td>
<td>-1</td>
</tr>
<tr>
<td>28. Good food and good health go hand in hand.</td>
<td>+2</td>
<td>+3</td>
<td>-3</td>
<td>+2</td>
</tr>
<tr>
<td>29. If you are going to get unwell you will - so I eat what I like and enjoy it.</td>
<td>-3</td>
<td>-4</td>
<td>+4</td>
<td>-5</td>
</tr>
<tr>
<td>31. Good food consists of health giving, nutritious, attractive, tasty food which is enjoyable to eat and at the same time gives satisfaction in the knowledge that it benefits body and mind i.e., wellbeing!</td>
<td>+4</td>
<td>+4</td>
<td>-4</td>
<td>+4</td>
</tr>
<tr>
<td>34. Food quality is not such a big deal - for the most part our food is of very good quality.</td>
<td>-1</td>
<td>-4</td>
<td>+4</td>
<td>-1</td>
</tr>
<tr>
<td>36. Good food is what is unprocessed and as natural as possible, with low chemical input.</td>
<td>+1</td>
<td>+4</td>
<td>-4</td>
<td>+2</td>
</tr>
<tr>
<td>50. Good food satisfies each taste and overloads each taste bud - sweet, sour, salty ...</td>
<td>-3</td>
<td>-3</td>
<td>+3</td>
<td>-4</td>
</tr>
<tr>
<td>51. Good food is one thing but I can't afford to spend my money on health foods.</td>
<td>-4</td>
<td>-3</td>
<td>+3</td>
<td>-2</td>
</tr>
<tr>
<td>58. All processed food should have complete labelling so I know exactly what's in it.</td>
<td>+3</td>
<td>+4</td>
<td>-4</td>
<td>+5</td>
</tr>
</tbody>
</table>

Note: discriminating statements selected for a difference in factor score of 5 points compared to all other types.
Type C is a meat eater who likes traditional food hence an appropriate label is "Traditional Meat Eater". There is a moral quality to the Traditional Meat Eater because the right food is traditional food. There is no linkage to food and health and little emphasis on sociability. While people of this type appear to be non-discriminatory in their approach to food, this occurs because they are not concerned about health, however, they do prefer traditional food.

4.6 Type D - The Selective Connoisseur

Tables 1 and 5 show the top ranked statements and discriminating statements for Type D. This group consists of people who are similar to the Gregarious Gourmet. For example, they emphasise that they are responsible for their health (27; +5, +2, -2, +5) and taste and social experience of eating are important (statements 37 and 39). However, they contrast in that they see food as fuel for life (41; +1, 0, 0, +5). They are also adamant about the need for food labelling (58; +3, +4, -4, +5) and they define good food as that which is satisfying without causing unnecessary side effects (42; 0, +1, -1, +3). These people choose their foods carefully to ensure good health (26; -1, +3, -3, +1). However, while they acknowledge that vegetarians have something going for them, they think some of them are a bit extreme (13; 0, 0, 0, +3).

These people, while selective in their good selection, are not vegetarians (14; -5, +5, -5, -5) and do not take a moral stand on food. They reject strongly the fatalist approach to health (29; -3, -4, +4, -5) and the idea that they should eat what they like and enjoy it. They also disapprove of the idea that talk of allergies is the problem and that it is just a matter of eating good food (55; -3, 0, 0, -5). Type Four people appear to be quite disciplined in their approach to food; they do not eat what they like when they like (3; 0, -1, +4, -4). Nor do they like crunchy or chewy foods (44; -1, -1, +1, -3). Food for them is not something which gets rid of the empty feeling for the longest time (45; -4, 0, 0, -2). Unlike the Virtuous Vegetarian, this type is neutral about the role of packaged and processed food in the cause of poor diet (57; -2, +3, -3, 0).

Type Four has some similarities with the Gregarious Gourmet and even some affinity with the Virtuous Vegetarian. These Type Four people are health conscious, responsible for their health and are selective in their diet. Food is a fuel and while it is important for its taste and as part of social experience, it is also important in itself. They are disciplined in their food selection because they seek good health, not because food causes allergic reactions but because it can have unwanted side effects. Hence food labelling is very important. It is possible that the idea of good food is problematic for this type - what is good depends on the individual with their own responsibilities and needs.
TABLE 5

Discriminating Statements for Type D

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>I eat what I like when I like.</td>
<td>0</td>
<td>-1</td>
<td>+1</td>
</tr>
<tr>
<td>13</td>
<td>I think vegetarians have got something going for them, but some of them are a bit extreme.</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>26</td>
<td>&quot;You are what you eat&quot; - I choose my foods carefully to ensure I have good health.</td>
<td>-1</td>
<td>+3</td>
<td>-3</td>
</tr>
<tr>
<td>42</td>
<td>Good food is something that satisfies inner needs without causing any unnecessary side effects.</td>
<td>0</td>
<td>+1</td>
<td>-1</td>
</tr>
<tr>
<td>44</td>
<td>I love good, crunchy chewy foods like chunky biscuits or chewy caramels.</td>
<td>-1</td>
<td>-1</td>
<td>+1</td>
</tr>
<tr>
<td>45</td>
<td>Good food gets rid of the empty feeling for the longest period of time.</td>
<td>-4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>57</td>
<td>Packaged, processed food is one of the major causes of poor diet today.</td>
<td>-2</td>
<td>+3</td>
<td>-3</td>
</tr>
</tbody>
</table>

Note: discriminating statements selected for a difference in factor score of 2 points compared to all other types.

This type is discriminating, carefully selecting appropriate foods about which she or he has some knowledge and expectation, thus suggesting the name "Selective Connoisseur". A connoisseur is a person who has expert knowledge and keen discrimination in some area (particularly in the fine arts or in matters of taste). In this usage, the Selective Connoisseur focuses on food.
CHAPTER 5

CONCLUSION

The results described in this report show that there are at least four distinctive perceptions of food among contemporary European New Zealand people in the 1990s. The Gregarious Gourmet emphasises the taste of food and its role in the social experience of eating, rather than its role in health, and eats many types of food. The Virtuous Vegetarian emphasises eating the right kind of food which is non-meat, natural and unprocessed, and actively selects the right food. The Traditional Meat Eater also seeks the right kind of food but in this case it is traditional food, and neither health nor sociability is an issue. The Selective Connoisseur is health conscious, selective in choice of food, and while enjoying taste and sociability, emphasises that food is a fuel.

These results show that different aspects of food have appeal to different types of people. Recognising these differences would be valuable to people who give dietary advice or are involved in nutrition management. Marketing people may also find the distinctions useful. In addition to these practical implications the results suggest to the sociologist that in New Zealand culture food does have attached to it strong and specific sets of meanings. Typically, people do not "graze" and eat anything but are selective in their preferences. Each set of preferences is backed by a variety of beliefs about why the preferred item is good food. Hence the very meaning of "good" food is relative and can mean different things to different people. In essence everyone eats good food.

Although there is no readily available evidence of dietary preferences in earlier decades, it may be that 30 years ago people did not adopt such diverse attitudes to food. Food would have been narrower in range and the typical diets would always include meat. The wider range of food types today are suggestive only that people are now more diet conscious and selective in their choice of food. Perhaps we are entering a critical phase in the development of the New Zealand diet in which there are a number of competing views of what is good food. The future may see the development of a dominant approach.

The speculation about dietary patterns would be on a sounder base if we knew the relative proportion in the population of each type of perception of food. This study has only described the range of types and further surveys are needed to assess the frequency of each type. Further, it can be expected that other types exist, especially among particular cultural groups. Another limitation of the research reported here is that it accounts for attitudes not behaviours. People may well aspire to a set of principles about food selection but in practice eat what is readily or inexpensively available. Research using food diaries for type representatives would address this problem.
The use of the Q method in this study of people's perceptions of food illustrates the utility of qualitative research. In this case the focus on subjectivity has broadened our understanding of perception of food and illustrated how food in our New Zealand culture bears different meanings for different groups of people.
LIST OF REFERENCES


## APPENDIX 1

List of Q Sort Statements with Factor Scores

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Some people say you should eat regular meals, but I eat whenever I'm hungry.</td>
<td>+1</td>
<td>0</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>2. A healthy diet is based on three good meals a day.</td>
<td>-2</td>
<td>-2</td>
<td>+2</td>
<td>-1</td>
</tr>
<tr>
<td>3. I eat what I like when I like.</td>
<td>0</td>
<td>-1</td>
<td>+1</td>
<td>-4</td>
</tr>
<tr>
<td>4. Complicated and time-consuming recipes may produce great meals, but I seldom have the time to do all the work.</td>
<td>+1</td>
<td>-1</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>5. Good cooking makes the meal - I enjoy the aroma of cooked food.</td>
<td>+2</td>
<td>-2</td>
<td>+2</td>
<td>+1</td>
</tr>
<tr>
<td>6. Cooking is the expression of personality, and a meal is a creation to be enjoyed.</td>
<td>+3</td>
<td>+1</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>7. Our NZ diet has had too much overcooked food - there is no surer way to spoil a meal than be overcooking it.</td>
<td>+2</td>
<td>+1</td>
<td>-1</td>
<td>+3</td>
</tr>
<tr>
<td>8. Rare, juicy steak is my ideal for a meat dish.</td>
<td>0</td>
<td>-2</td>
<td>+2</td>
<td>-3</td>
</tr>
<tr>
<td>9. Raw is best - why destroy the goodness of food by cooking?</td>
<td>-1</td>
<td>+2</td>
<td>-2</td>
<td>-3</td>
</tr>
<tr>
<td>10. Fresh fruit and vegetables are the basis of an ideal diet.</td>
<td>+1</td>
<td>+4</td>
<td>-4</td>
<td>+2</td>
</tr>
<tr>
<td>11. I like all types of food - it's all good for you.</td>
<td>-3</td>
<td>-4</td>
<td>+4</td>
<td>-3</td>
</tr>
<tr>
<td>12. Vegetarians are missing out on some great taste experiences.</td>
<td>0</td>
<td>-3</td>
<td>+3</td>
<td>0</td>
</tr>
<tr>
<td>13. I think vegetarians have got something going for them, but some of them are a bit extreme.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>+3</td>
</tr>
<tr>
<td>14. Vegetarianism is the way of the future - we can't keep on slaughtering animals for our benefit.</td>
<td>-5</td>
<td>+5</td>
<td>-5</td>
<td>-5</td>
</tr>
<tr>
<td>15. Non-meat dishes can supply all the nutrients we need.</td>
<td>0</td>
<td>+5</td>
<td>-5</td>
<td>0</td>
</tr>
</tbody>
</table>
16. Killing animals for our food is barbaric. -5 +5 -5 -4
17. A meal is not a meal without meat. -4 -5 +5 -3
18. Today it is possible to learn from the health research and avoid salt and cholesterol for example. +4 +3 -3 +2
19. Next thing they will find that we shouldn't eat vegetables - there is too much advice on what we should and shouldn't eat. -2 -3 +3 -1
20. The basic NZ diet has served us well - the traditional foods are our best foods. -3 -5 +5 -2
21. I like to try new foods - the taste and variety add interest to eating. +4 +2 -2 +3
22. I like traditional farm food like roasts, puddings and good home cooking - people have lived for years without trendy high fibre, low cholesterol diets. -1 -4 +4 -1
23. A balanced diet is OK - but I eat sweets and cakes and enjoy them too. +2 -1 +1 0
24. Food by itself needs something to give it zest - I use salt and pepper, and sauces or gravy where appropriate. -2 -2 +2 -1
25. Occasional eating of junk food isn't going to hurt anybody. +3 0 0 +1
26. "You are what you eat" - I choose my foods carefully to ensure I have good health. -1 +3 -3 +1
27. Of all people, I am the one most responsible for my health. +5 +2 -2 +5
28. Good food and good health go hand in hand. +2 +3 -3 +2
29. If you are going to get unwell you will - so I eat what I like and enjoy it. -3 -4 +4 -5
30. Many factors go into making up your state of health. +4 +1 +4 +4
31. Good food consists of health giving, nutritious, attractive, tasty food which is enjoyable to eat and at the same time gives satisfaction in the knowledge that it benefits body and mind i.e., well being! +4 +4 -4 +4
32. Much of today's food is filled with unwanted and unnecessary additives - I want pure food. 0 +3 -3 +1
33. Some sectors of the food industry are providing the kind of food I want - sometimes I have to hunt it out but I can usually get it.  
34. Food quality is not such a big deal - for the most part our food is of very good quality.  
35. This organic food issue - it's ridiculous all food has chemicals in it.  
36. Good food is what is unprocessed and natural as possible, with low chemical input.  
37. Eating food is a taste experience - I enjoy the satisfaction of eating a well-prepared meal.  
38. Good food to me is food that makes me want to eat it due to its appearance and smell. It is food that makes me feel good after having eaten it.  
39. Food enables people to enjoy the company of friends - a chance to meet and talk.  
40. I enjoy food that is sumptuous and gives the right atmosphere for the occasion.  
41. Food is basically fuel for life.  
42. Good food is something that satisfies inner needs without causing any unnecessary side effects.  
43. Food satisfies my hunger, tastes good and fills me up.  
44. I love good, crunchy, chewy food like chunky biscuits or chewy caramels.  
45. Good food gets rid of the empty feeling for the longest period of time.  
46. Good food to me is anything that tastes good and that I can eat plenty of.  
47. Food has to taste good no matter how healthy it is, otherwise I won't eat it.  
48. I think people should eat what they prefer and what they think is good for them.  
49. I love rich, smooth, creamy textures and the feel of foods like chocolate or a rich desert.
50. Good food satisfies every taste and overloads each taste bud - sweet, sour, salty ...

51. Good food is one thing but I can't afford to spend my money on health foods.

52. I will pay for good food - my health is important so there's no point in short changing myself.

53. I'm finding I have to watch what I eat because of allergic reactions.

54. There are strong connections between what we eat and how we feel - I am careful with what I eat because of reactions and side effects.

55. All this talk of allergies is half of the problem - just eat good food and you will be OK.

56. The food industry has got a lot to answer for - there is not enough care over food quality.

57. Packaged, processed food is one of the major causes of poor diet today.

58. All processed foods should have complete labelling so I know exactly what's in it.

59. New food products are being provided all the time - there is enough variety to satisfy everyone's needs.
Discussion Papers


121 Papers Presented at the Thirteenth Annual Conference of the NZ Branch of the Australian Agricultural Economics Society, Volumes 1 and 2, November 1988.


123 Do our Experts Hold the Key to Improved Farm Management? P.L. Nuttall, May 1989.


125 Papers Presented at the Fourteenth Annual Conference of the NZ Branch of the Australian Agricultural Economics Society, Volumes 1 and 2, October 1989.
