Part II

Appendices

An investigation of several psychological factors which influence the perception of fresh fruits and vegetables

by

Sue-Ellen Kjeldal, B.A. Hons. (UNE)
February, 1998
## Table of Contents

### Appendix 1 - Commonality Study
Instruction Sheet and Ratings Lists ................................................. 1

### Appendix 2 - Commonality Study
Demographics Questionnaire ....................................................... 4

### Appendix 3 - Word Association Study
Fruit and Vegetable Stimulus Materials .......................................... 7

### Appendix 4 - Word Association Study
Instruction Sheet and Response Booklet ........................................ 19

### Appendix 5 - Word Association Study
Favourability Ratings ..................................................................... 21

### Appendix 6 - Word Association Study
Demographic Questionnaire ............................................................ 25

### Appendix 7 - Word Association Study
Self Monitoring Questionnaire .......................................................... 27

### Appendix 8 - World Association Study
Ethical Clearance Form .................................................................. 29

### Appendix 9 - World Association Study
Fruit and Vegetable Frequency Tables ............................................. 30

### Appendix 10 - Word Association Study
Instructions for Raters and Definitions of Categories ....................... 219

### Appendix 11 - Results
Standardised Residuals (SR) in 3-Way Log-Linear Contingency Table: for Fruits and Vegetables ........................................ 223
INSTRUCTION SHEET AND RATING LISTS

UNIVERSITY OF NEW ENGLAND
Graduate School of Business Administration
Fresh Food Research Group

FRUIT AND VEGETABLE COMMONALITY RATINGS

Instructions

I am currently studying for a Postgraduate degree through the Graduate School of Business Administration, and I’d like to engage your assistance in relation to my research on Consumer Decision Making Processes. Your name is not required for this study, however, it would be helpful if you would fill in the brief questionnaire after you have completed the fruit and vegetable ratings. The questionnaire is included to assist us in understanding various aspects of fruit and vegetable consumption, and is located on the last pages of this booklet. Should you have any questions regarding any aspect of my research, including this questionnaire, please feel free to contact either myself or my supervisor, Associate Professor Richard Gates (our phone numbers are listed below).

On the next page is a list of fruits. On the back of that page, you will find a list of vegetables. We would like you, firstly, to read through the list of fruits, and to choose, from the list, the ten (10) fruits that you consider to be the most commonly consumed by the majority of individuals in Australia. Please note that you are not being asked to indicate your own preferences. Merely rate the fruits that you would consider are most commonly consumed by the Australian population. You will notice that there is a space provided alongside each fruit name. After reading through the list (you may read the list through as many times as you wish), please place the number ‘1’ alongside the fruit that you feel is the most common, in the space provided. Next, select the fruit that you consider to be the next most common, and place the number ‘2’ alongside the fruit name. Continue in this manner until you have chosen what you consider to be the ten (10) most common fruits.

When you have finished the task, please turn the sheet over, and choose, from the list of vegetables, the ten (10) vegetables that you consider to be the most commonly consumed by the majority of individuals in Australia. Please read through the instructions again before you start on the vegetable ratings, to ensure that you complete the two tasks similarly.

When you have completed the ratings, please either: (a) return the form to me (Sue-Ellen Kjeldal), c/o MBA Program, or phone me on Ext. 304 1, and I will collect the form from you. Once again, thank you for your participation.

Sue-Ellen Kjeldal
Postgraduate Student
Ext. 3043
UNE Phone Number: 73 3333

Assoc. Prof. Dr. R. Gates
Director, MBA Program
Ext. 2566
Fruit and Vegetable Commonality Ratings

Vegetable List

............Celery
............Snow Peas
............Squash
............Turnips
............Cucumber
............Potatoes
............Cape Gooseberry (Ground Cherry)
............Cabbage
............Senposai
............Carrots
............Kohl Rabi
............Asparagus
............Pumpkin
............Scorzonera
............Broccoli
............Sweet Potatoes
............Artichokes
............Capsicum (Bell Peppers)
............Eggplant (Aubergine)
............Borecole (Scotch Kale or Curly Greens)
............Shallots (Eschalots or Spring Onions)
............Rosella (Jamaica Sorrel)
............Chinese Cabbage (Pak Choy or Bok Choy)
............Salsify (Oyster Plant or Vegetable Oyster)
............Beans
............Mushrooms
............Cauliflower
............Swedes
............Endive
............Onions
............Rhubarb
............Tomatoes
............Spinach
............Beetroot
............Okra
............Chicory (Witloof)
............Peas
............Choko
............Sweet Corn
............Lettuce
............Marrow
............Leeks
............Watercress
............Silverbeet
............Radish
............Brussel Sprouts
............Zucchinis

Now that you have finished the vegetable ratings please turn to the back of this page to begin the fruit ratings.
FRUIT AND VEGETABLE
COMMONALITY RATINGS

Fruit List

.........Grapes
.........Watermelon
.........Custard Apples
.........Apples
.........Bananas
.........Blackberry
.........Rockmelon (Cantaloupe)
.........Nashi Pears
.........Apricots
.........Blackcurrants
.........Blueberry
.........Guava
.........Gooseberry
.........Nectarines
.........Kiwifruit (Chinese Goos{e}r{ry})
.........Starfruit
.........Mandarins (Tangerines)
.........Passionfruit
.........Currants
.........Strawberry
.........Youngberry
.........Avocado
.........Peaches
.........Dates
.........Limes
.........Figs
.........Oranges
.........Sultanas
.........Grapefruit
.........Pears
.........Kumquats
.........Honeydew Melon
.........Plums
.........Boysenberry
.........Papaw (Paw Paw)
.........Pomegranates
.........Raspberry
.........Olives
.........Prunes
.........Persimmon
.........Lemons
.........Lychees (Litchi)
.........Cherries
.........Loganberry
.........Pineapple
.........Mangoes
DEMOGRAPHICS QUESTIONNAIRE

UNIVERSITY OF NEW ENGLAND
Graduate School of Business Administration
Fresl Food Research Group

FRUIT AND VEGETABLE COMMUNITY RATINGs

Questionnaire

Below is a list of questions that relate to certain aspects of lifestyle. This type of information can assist us greatly in our understanding of fruit and vegetable consumption patterns, and it is for this reason that we are asking for your cooperation in filling out this questionnaire. Please remember that your name is not required, and that your answers will be treated in a completely confidential manner. If you have additional comments with regard to any of the questions, or to the questionnaire as a whole, please feel free to write them in the space provided at the end of the questionnaire. Please indicate your response by placing a tick (✓) in the appropriate box.

1. Are you male or female?
   1. Female.......... □  2. Male.......... □

2. To which age group do you belong?
   1. 10 - 19 years.......... □  2. 20 - 29 years.......... □
   3. 30 - 39 years.......... □  4. 40 - 49 years.......... □
   5. 50 - 59 years.......... □  6. 60 years or over...... □

3. What is your present marital status?
   1. Married.......... □  4. Separated...... □
   2. Single.......... □  5. De Facto...... □
   3. Divorced...... □

4. What is your current place of residence?

   Town/City.__________________________

   State.__________________________

   Country.__________________________

5. What is your country of origin?


6. If your country of origin is not Australia, how long have you resided in Australia?


7. Of those who normally live in your household (excluding visitors), how many are:

<table>
<thead>
<tr>
<th>women (18 and old)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>men (18 and older)</td>
<td></td>
</tr>
<tr>
<td>children (0-5 years)</td>
<td></td>
</tr>
<tr>
<td>children (6-11 years)</td>
<td></td>
</tr>
<tr>
<td>youths (12-17 years)</td>
<td></td>
</tr>
</tbody>
</table>

8. Where do you usually buy your fruit and vegetables?
1. Supermarket ........................................ [ ]  2. Greengrocers .................................... [ ]
3. Supermarket and Greengrocers ......................... [ ]  4. Other ............................................. [ ]
(if other, please specify in the space provided)

__________________________

__________________________

9. In the last 12 months, what was your main source of income?

Please place a tick in one box only.

- self employed ....................................... [ ]
- unskilled labour .................................... [ ]
- semi-skilled labour ................................ [ ]
- skilled labour ....................................... [ ]
- clerical work ....................................... [ ]
- professional work .................................. [ ]
- unemployment payments ............................ [ ]
- retirement pension .................................. [ ]
- AUSTUDY allowance ................................ [ ]
- supporting parents allowance ...................... [ ]
- invalid pension ..................................... [ ]
- repatriation pension ................................ [ ]
- rent .................................................... [ ]
- interest .............................................. [ ]
- other .................................................. [ ]

10. Please indicate the nature of the work that you do.
11. What is your own and your spouse/partner's income before tax -
your family's total taxable income category?

<table>
<thead>
<tr>
<th>Per Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. $1 - $10000</td>
<td>□</td>
</tr>
<tr>
<td>2. $10000 - $20000</td>
<td>□</td>
</tr>
<tr>
<td>3. $20000 - $30000</td>
<td>□</td>
</tr>
<tr>
<td>4. $30000 - $40000</td>
<td>□</td>
</tr>
<tr>
<td>5. $40000 - $50000</td>
<td>□</td>
</tr>
<tr>
<td>6. Over $50000</td>
<td>□</td>
</tr>
</tbody>
</table>

Additional Comments: if you have any comments regarding particular questions, or the questionnaire as a whole, please write them in the space provided.

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________
FRUIT AND VEGETABLE STIMULUS MATERIALS

potato
potato
potato
potato
pineapple
pineapple
pineapple
pear
pear
pear
INSTRUCTION SHEET AND RESPONSE BOOKLET

Subject Number __________
Condition ________________

WORD ASSOCIATION STUDY
RESPONSE BOOKLET

When you open this response booklet, on each page you will find ten numbered spaces. These are for you to record your associations. Use one page for each word, i.e., when you have finished responding to one word, please turn the page before you start to write down associations to the next word.

Please bear in mind that the only responses that are of interest to us are the ones that immediately come to mind when you look at the word. So, if no words come to mind, or if you find yourself having to try too hard to think of a word, simply move on to the next word.
Subject Number __________
Condition ______________

1 _________________

2 _________________

3 _________________

4 _________________

5 _________________

6 _________________

7 _________________

8 _________________

9 _________________

10 _________________
FAVOURABILITY RATINGS

LIKEABILITY RATINGS

Here is a list of twenty fruits and vegetables. Alongside each name is a rating scale with *dislike intensely* at one end and *like immensely* at the other.

Please indicate how much you like each of the fruits and vegetables by circling the stroke on the rating scale which best represents your judgement.

**Grapes**

![Grapes Rating Scale]

**Cauliflower**

![Cauliflower Rating Scale]

**Strawberry**

![Strawberry Rating Scale]

**Beans**

![Beans Rating Scale]

PLEASE TURN THE PAGE
Pineapple

Carrot

Broccoli

Pumpkin

Pear

Peas

PLEASE TURN THE PAGE
Apple

<table>
<thead>
<tr>
<th>Dislike Intensely</th>
<th>Like Immensely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

Potato

<table>
<thead>
<tr>
<th>Dislike Intensely</th>
<th>Like Immensely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

Lemon

<table>
<thead>
<tr>
<th>Dislike Intensely</th>
<th>Like Immensely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

Peach

<table>
<thead>
<tr>
<th>Dislike Intensely</th>
<th>Like Immensely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>
DEMOGRAPHIC QUESTIONNAIRE

Please reply to each item by circling the appropriate answer.

1. To which age group do you belong?
   1. 18 - 24 years
   2. 25 - 39 years
   3. 40 - 54 years
   4. 55 + years

2. Are you female or male?
   1. Female
   2. Male

3. What is your present marital status?
   1. married (includes de facto)
   2. single (includes divorced)

4. Which category best describes the type of work that you are now doing?
   1. Manager or administrator
   2. Professional
   3. Para-professional
   4. Tradesperson
   5. Clerk
   6. Sales or personal service worker
   7. Plant & machine operator or driver
   8. Labourer or related worker
   9. Unemployed
5. What is your family’s total taxable income category - your own and your spouse/partner’s income before tax?

1. $0 - $10,000
2. $10,001 - $20,000
3. $20,001 - $30,000
4. $30,001 - $40,000
5. $40,001 - $50,000
6. $50,001 - $60,000
7. over $60,001

6. Of those who normally live in your household (excluding visitors and including yourself), how many are:

- women (18 and older)
- men (18 and older)
- children (0 - 5 years)
- children (6 - 11 years)
- adolescents (12 - 17 years)
SELF MONITORING QUESTIONNAIRE

SELF-MONITORING QUESTIONNAIRE

The following statements concern your reactions to a number of different situations. Please reply to each item by circling the appropriate answer.

1. I find it hard to imitate the behaviour of other people.
   
   TRUE   FALSE

2. At parties and social gatherings, I do not attempt to do or say things that others will like.
   
   TRUE   FALSE

3. I can only argue for ideas which I already believe.
   
   TRUE   FALSE

4. I can make impromptu speeches even on topics about which I have almost no information.
   
   TRUE   FALSE

5. I guess I put on a show to impress or entertain others.
   
   TRUE   FALSE

6. I would probably make a good actor.
   
   TRUE   FALSE

7. In a group of people I am rarely the centre of attention.
   
   TRUE   FALSE

8. In different situations and with different people, I often act like very different persons.
   
   TRUE   FALSE

9. I am not particularly good at making other people like me.
   
   TRUE   FALSE

10. I'm not always the person I appear to be.
11. I would not change my opinions (or the way I do things) in order to please someone or win their favour.
   TRUE      FALSE

12. I have considered being an enter ainer.
   TRUE      FALSE

13. I have never been good at games like charades or improvisational acting.
   TRUE      FALSE

14. I have trouble changing my behaviour to suit different people and different situations.
   TRUE      FALSE

15. At a party I let others keep the jokes and stories going.
   TRUE      FALSE

16. I feel a bit awkward in public and do not show up quite as well as I should/
   TRUE      FALSE

17. I can look anyone in the eye and tell a lie with a straight face (if for a right end).
   TRUE      FALSE

18. I may deceive people by being friendly when I really dislike them.
   TRUE      FALSE
ETHICAL CLEARANCE FORM

FRUIT AND VEGETABLE WORD ASSOCIATION STUDY

Welcome to our word association study. During the next 20 minutes, we're going to ask you to complete two different tasks. The first task relates to fruit and vegetable perception. We're interested in the way in which people think about different fruits and vegetables.

Pictures of various fruits and vegetables will appear on your computer screen, one at a time. We would like you to look at each picture and type into the computer any words that the picture brings to mind. It doesn't matter what word(s) you write down, as long as the picture makes you think of it.

After you have finished the word association task, you will automatically move on to complete two questionnaires and an evaluation task. The first questionnaire concerns the way that you respond in different situations. The second asks questions relating to certain aspects of lifestyle.

Your name will not be recorded anywhere, thus ensuring that the information you provide will be completely anonymous in nature. In addition, you are free to withdraw from the study at any time.

If you have any questions concerning the study, please contact either Sue-Ellen Kjeldal or Assoc. Prof. Richard Gates (our phone numbers are listed below). Your participation in this study is greatly appreciated.

Assoc. Prof. G. R. Gates
Deputy Director
MBA Program
UNE
Phone: 73 2566

Sue-Ellen Kjeldal
Ph.D. student
Phone: 73 3603

I (the participant) have read the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this activity, realising that I may withdraw at any time. I agree that research data gathered for the study may be published, provided my name is not used.

Participant or Authorised Representative  Date