

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**A cross-cultural content analysis of the portrayal of food and
nutrition, in television advertising and programmes
in New Zealand and Japan in 2002/2003.**

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

**MBS
in
Marketing**

at Massey University, Albany, New Zealand

Jacinta Hawkins

2003

Abstract

The purpose of this study was to examine and compare the food-related messages that are presented to children on New Zealand and Japanese television. A sample of 25 programmes, including advertisements broadcast on New Zealand's main free-to-air network stations and a sample of 22 programmes, including advertisements broadcast on Japan's network stations were the basis of this study. Food-related messages, content and portrayed eating behaviours were analysed. The main finding of this study suggest that the advertising content of children's programmes contain a large proportion of food advertising, largely for foods high in fat and sugar. The children's programming environments in both New Zealand and Japan also contain a large proportion of food imagery, which does include a variety of healthy foods such as meat, rice, bread, fruit and vegetables. Of more concern is that whilst Japanese children are mainly watching children's programmes, in New Zealand, children are exposed to numerous unhealthy food related imagery during programmes of which they are heavy viewers, although they are not the target audience, i.e. peak viewing periods, typically 6pm -10:30pm daily. Furthermore the unhealthy eating imagery during peak viewing periods may be contributing towards shaping children's nutrition practices. It is recommended that marketers and policy makers consider these issues in regard to the claims that advertising is a contributing factor to obesity. Due to the high incidence of eating behaviours occurring during programme content it is recommended that an advertising ban during children's programmes in New Zealand and Japan would be inconsistent, ineffective and unjustifiable.

Acknowledgements

I would like to express my gratitude to the many people who have contributed to, and supported me throughout this academic endeavour.

Firstly, thanks to my supervisor Lynne Eagle, and my advisor Sandy Bulmer. It is because of lecturers like you that I thoroughly enjoyed my undergraduate years at Massey and subsequently became interested in postgraduate study. You have both provided invaluable knowledge, advice and support during this process. Thank you for guiding my learning.

Thank you to those who provided television viewership ratings data for this study: AC Nielsen, New Zealand; and Douglas Faudet, President and Chief Executive Officer, and Takashi Kijima, Senior Media Director, of DDB Japan. Without your assistance this study would not have been possible.

Collecting and analysing the video samples for this study would not have been possible if it wasn't for the help of some dear friends: thanks to Olyvia and Tony; Olyvia for volunteering your time to the arduous task of coding, and Tony for attending to my videotaping requests. I must also thank Tony for agreeing to format this document at the last moment and Olyvia for being so supportive throughout this process. I am thankful to have two such wonderful people in my life.

Thanks to Nao and Machiko Nakagaki for their assistance with obtaining the video tapes of the sampled Japanese programmes, helping with translation tasks and for their friendship. You have helped my love of "all things Japanese" grow.

Thanks to Erica Styles and Sonya Eastmond for their secretarial support. You have helped me with the “fiddly” things that I could no longer cope with myself. I am grateful for your assistance and also your friendship. You have both provided encouragement when I needed it the most.

Thanks to Dennis Styles for editing this work. I appreciate the time and effort you have given selflessly to this project. Your thoroughness and perfectionism has inspired me to settle for nothing less.

Finally, thank you to my mum, dad and brother Fraser, Dustan and my friends. It has been difficult to explain to you what this process is about, but you have always listened. My mum, dad and Fraser especially have always supported the academic choices I have made. I am grateful to have been brought up in an environment that encouraged making the most of great opportunities; this has allowed my passion for learning to prosper.

Table of contents

ABSTRACT	II
ACKNOWLEDGEMENTS	III
TABLE OF CONTENTS	V
LIST OF FIGURES	VIII
LIST OF TABLES	IX
GLOSSARY OF TERMS	X
FOR THE PURPOSE OF THIS STUDY:	X
Children	x
Fat	x
Food	x
Obesity.....	xi
Physical activity	xii
1 INTRODUCTION	1
2 LITERATURE REVIEW	4
2.1 Introduction.....	4
2.1.1 Social consequences of obesity.....	6
2.2 Broader communication issues	7
2.2.1 Advertising.....	8
2.2.1.1 Advertising expenditure.....	8
2.2.1.2 Advertising style	9
2.2.1.3 Regulation	11
2.3 Likely causes of obesity.....	13
2.3.1 Obesity and genetics	13
2.3.2 Television watching, exercise and obesity.....	14
2.3.3 Lifestyles and eating choices	16
2.3.4 Advertising, children and obesity	21
2.3.4.1 Communication theory.....	23
2.3.4.2 Television content analyses	24
2.3.4.3 Television advertising and nutrition practices	28
2.4 Proposed public policy changes to reduce obesity.....	28
2.4.1 Fat/Sin taxes	29
2.4.2 Health education	31
2.4.3 Advertising restrictions.....	33
2.5 Summary of literature and research aims.....	37

3	RESEARCH METHODOLOGY	39
3.1	Content analysis.....	39
3.2	Selection methods/criteria.....	42
3.3	Procedures.....	43
3.4	Coding schedules.....	45
3.5	Statistical calculation	49
4	RESULTS.....	51
4.1	New Zealand television.....	51
4.1.1	Summary of New Zealand programmes analysed.....	51
4.1.2	Frequency of New Zealand food advertisements.....	53
4.1.3	Foods featured in New Zealand advertising and during each New Zealand programme type	55
4.1.4	Food episodes in New Zealand programme content	59
4.1.5	Foods featured in New Zealand advertising and New Zealand programme content	60
4.1.5.1	Meat, fish, and poultry	60
4.1.5.2	Beverages.....	62
4.1.5.3	Fruit and vegetables	66
4.1.5.4	Bread, cereals and grains	68
4.1.5.5	Dairy products.....	70
4.1.5.6	Snacks, sweets and desserts	72
4.1.5.7	Microwave meals and snacks.....	75
4.1.5.8	Fast food	76
4.1.5.9	Miscellaneous	77
4.1.5.10	Summary of significant food relationships featured in advertising and programme content	79
4.1.6	Eating episodes, settings, locations and situations by programme type.....	80
4.1.6.1	Eating episodes by programme type	80
4.1.6.2	Setting by New Zealand programme type.....	82
4.1.6.3	Location by New Zealand programme type.....	84
4.1.6.4	Situation by New Zealand programme type.....	86
4.2	Japanese television.....	89
4.2.1	Summary of Japanese programmes analysed.....	89
4.2.2	Frequency of Japanese food advertisements	91
4.2.3	Foods featured in Japanese advertising and within each Japanese programtype	92
4.2.4	Food episodes in Japanese programme content	95
4.2.5	Foods featured in Japanese advertising and Japanese programme content.....	96
4.2.5.1	Meat, fish, and poultry	98
4.2.5.2	Beverages.....	102
4.2.5.3	Fruit and vegetables	104
4.2.5.4	Bread, cereals and grains	106
4.2.5.5	Dairy products.....	111
4.2.5.6	Snacks, sweets and desserts	112
4.2.5.7	Microwave meals and snacks.....	113
4.2.5.8	Fast food	113
4.2.5.9	Miscellaneous foods.....	115
4.2.5.10	Summary of significant food relationships featured in advertising and programme content	116
4.2.6	Eating episodes, settings, locations and situations by Japanese programme type	117
4.2.6.1	Eating episodes by Japanese programme type	117
4.2.6.2	Setting by Japanese programme type	119
4.2.6.3	Location by Japanese programme type	121

4.2.6.4	Situation by Japanese programme type.....	122
4.3	Alcohol and cigarettes.....	124
5	DISCUSSION	126
5.1	Comparison of New Zealand and Japanese media environments	126
5.2	Food related advertising.....	127
5.3	Frequency of food related imagery in programme content	130
5.4	Foods featured in programme content	131
5.5	Food and eating behaviours	133
5.6	Eating environments and scene locations	135
5.7	Limitations	136
6	CONCLUSIONS AND IMPLICATIONS.....	139
7	REFERENCES	147
8	APPENDICES	156
	APPENDIX 1: NZ PHYSICAL ACTIVITY INFORMATION.....	157
	APPENDIX 2: USA DIETARY GUIDELINES	158
	APPENDIX 3: NZ ADVERTISING CODES OF PRACTICE.....	159
	APPENDIX 4: THE FOOD GUIDE PYRAMID.....	160
	APPENDIX 5: NZ DIETARY GUIDELINES FOR CHILDREN.....	161
	APPENDIX 6: KAUFMAN, 1980	162
	APPENDIX 7: AVERY ET AL., 1997	163
	APPENDIX 8: NEW ZEALAND TELEVISION SAMPLE.....	164
	APPENDIX 9: ACNIELSEN	165
	APPENDIX 10: VIDEO RESEARCH LTD.....	166
	APPENDIX 11: JAPANESE DIETARY GUIDELINES	167

List of Figures

Figure 1: Breakfast cereal advertisement (New Zealand).....	55
Figure 2: Character consuming wine on Shortland Street (New Zealand)	56
Figure 3: Characters consuming breads and fruit on Digimon (New Zealand)	57
Figure 4: Bottled tea advertisement (Japan)	92
Figure 5: Segment on Taiwanese food on Sekai Marumie! (Japan).	93
Figure 6: Characters preparing corncocks on Chibimaruko-chan (Japan).	94
Figure 7: Beer advertisement (Japan).	125
Figure 8: Cigarettes shown during the cartoon Chibimaruko-chan (Japan).	125
Figure 9: Characters drinking beer during the cartoon Sazae-san (Japan).	125

List of Tables

Table 1: Summary of New Zealand programmes analysed	52
Table 2: Summary of New Zealand advertisements analysed	54
Table 3: Frequency of foods featured in New Zealand advertising and during each New Zealand programme type	58
Table 4: Summary of food episodes in New Zealand programme content.....	59
Table 5: Percentage of occurrences of food types within overall New Zealand media environment (advertising and programmes).	60
Table 6: Percentage of occurrences of meat by New Zealand programme type.....	61
Table 7: Percentage of occurrences of beverages by New Zealand programme type.....	63
Table 8: Percentage of occurrences of beverages by New Zealand programme type.....	65
Table 9: Percentage of occurrences of fruit and vegetables by New Zealand programme type	67
Table 10: Percentage of occurrences of bread, cereals and grains by New Zealand programme type	68
Table 11: Percentage of occurrences of bread by New Zealand programme type.....	70
Table 12: Percentage of occurrences of dairy products by New Zealand programme type.....	71
Table 13: Percentage of occurrences of snacks, sweets and desserts by New Zealand programme type	72
Table 14: Percentage of occurrences of cakes, pies and cookies by New Zealand programme type	74
Table 15: Percentage of occurrences of microwave meals and snacks by New Zealand programme type	75
Table 16: Percentage of occurrences of fast food by New Zealand programme type	76
Table 17: Percentage of occurrences of miscellaneous foods by New Zealand programme type	78
Table 18: Eating episodes by New Zealand programme type.....	81
Table 19: Setting by New Zealand programme type	83
Table 20: Location by New Zealand programme type.....	84
Table 21: Situation by New Zealand programme type	87
Table 22: Summary of Japanese programmes analysed.....	90
Table 23: Summary of Japanese advertisements analysed.....	91
Table 24: Frequency of foods featured in Japanese advertising and during each Japanese programme type	94
Table 25: Summary of food episodes in Japanese programme content	95
Table 26: Percentage of occurrences of food types within overall Japanese media environment (advertising and programmes).	97
Table 27: Percentage of occurrences of meat by Japanese programme type	98
Table 28: Percentage of occurrences of meat by Japanese programme type	100
Table 29: Percentage of occurrences of beverages by Japanese programme type.....	103
Table 30: Percentage of occurrences of fruit and vegetables by Japanese programme type ...	105
Table 31: Percentage of occurrences of bread, cereals and grains by Japanese programme type	107
Table 32: Percentage of occurrences of bread, cereals and grains by Japanese programme type	109
Table 33: Percentage of occurrences of dairy products by Japanese programme type.....	111
Table 34: Percentage of occurrences of snacks, sweets and desserts by Japanese programme type	112
Table 35: Percentage of occurrences of fast food by Japanese programme type.....	114
Table 36: Percentage of occurrences of miscellaneous foods by Japanese programme type ..	115
Table 37: Eating episodes by Japanese programme type.....	118
Table 38: Setting by Japanese programme type.....	120
Table 39: Location by Japanese programme type.....	122
Table 40: Situation by Japanese programme type.....	123

Glossary of terms

For the purpose of this study:

Children

Are defined as being aged between four and fourteen unless otherwise stated. This combines the AC Nielsen (New Zealand) definition of children (aged 5-14) and the Video Research (Japan) definition of children (aged 4-12).

Fat

The Food Guide Pyramid (USDA, 2000) and other similar dietary guidelines recommend a diet low in fat. A “high fat” diet is one that consists of between 30% to 40% of a person’s total daily energy intake. A “low fat” intake is 20% to 25% of energy intake (WHO, 2000b).

Food

A variety of food terms have been used throughout this report, including “junk food”, “treat food” “unhealthy food” and “food of low nutritional value”.

Firstly, Kaufman’s (1980) definition of “food” was used and is as follows: “any article used for food or drink by humans, including chewing gum” (p.37).

“Junk food” is defined as: “food which is eaten in addition to or instead of regular meals, and which often has low nutritional value” (Collins Concise Dictionary, 2001, p.794).

It was not possible to obtain a standard definition of “treat food” per se. However, there are two seemingly generally agreed upon components that the term “treat food” encompasses: 1. treat foods are to be eaten occasionally, and

2. treat foods are foods high in fat, sugar and salt. The New Zealand Ministry of Health (NZMH) allude to this, stating, “foods that are high in fat, salt or sugar are best left for occasional treats” (NZMH, 1997, p.30).

The terms “unhealthy food” and “food of low nutritional value” are seemingly spin-off terms that generally refer to the same types of foods categorised as “junk food” and “treat food”. These colloquial phrases are used in this report interchangeably.

Whilst the definitions supplied qualify the nature of these foods i.e. foods high in fat, sugar and salt, there is no provision for specific “junk food” examples. Obesity and nutrition related literature suggests that the following foods could be classified by these terms: beverages with high sugar content e.g. some fruit juices, energy drinks and soft drinks, confectionery, e.g. chocolate, sweets and cakes and biscuits, potato crisps and fast food, e.g. fish and chips, burgers and fries. However, this list is by no means exhaustive. Furthermore, it is important to note that authorities such as the NZMH comment that moderation is very important and that no one food is inherently “bad” (NZMH, 1997). According to Xhles and Miles (1982, cited in NZMH, 1997, p.30), “if most of a child’s meals are nutritionally sound, occasional treats of potato chips, soft drinks, sweets and fast food are acceptable”.

Obesity

Obesity, defined by the World Health Organisation (WHO, 2000b) is based on the Body Mass Index (BMI), calculated as the weight in kilograms divided by the square of the height in metres. A BMI equal to or greater than 25 is considered “overweight” and a BMI of 30 and above denotes “obesity”. Normal weights are in the range of 18.5-25.

However, in an alternative document the WHO (2000a) comment that although in some Asian populations the prevalence of obesity is lower than in Europe,

the health risks associated with obesity occur at a lower BMI in Asian populations. Furthermore, Polynesians tend to be more muscular with higher BMI's than Europeans, but have lower fat levels for the same BMI. Consequently, the WHO recognises that current criteria for defining obesity may not be appropriate for some nationalities. However, at the time of writing this report BMI is still the most widely used tool for obesity measurement.

Physical activity

In 2001 the NZMH produced a document entitled, "New Zealand Health Strategy. DHB Toolkit: Physical Activity. Edition 1." The document discusses in detail issues relating to physical activity. The definitions in this report are based on those provided by the NZMH.

Physical activity is defined as follows:

"Any bodily movement produced by skeletal muscles that results in energy expenditure. It comprises duration, frequency, intensity, type and context" (Caspersen, Powell and Christenson, 1985, cited in NZMH, 2001, p.13).

The NZMH also provides definitions for "exercise", "physical fitness" and different levels of activity. These are contained in Appendix 1.

In 2001 The Hillary Commission developed physical activity guidelines for New Zealanders. These guidelines are also documented in the NZMH physical activity report, included in Appendix 1.