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# Got milk? : the influence of toddler formula advertising on attitudes and beliefs about infant feeding

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**School of Health Sciences**

# **Got Milk?**

## **The influence of toddler formula advertising on attitudes and beliefs about infant feeding**

A thesis

submitted in fulfilment of the requirements for the award of the

**Degree of Doctor of Philosophy**

of the

**University of Wollongong**

by

**Nina Jane Berry BA/BEd (Hons) DipArts**

**2010**

## **Declaration**

I declare that this thesis is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Nina Jane Berry

22<sup>nd</sup> March 2010

## Acknowledgements

*All I have needed Thy hand hath provided ...*

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*Nihil sine labore*

## **Abstract**

**AIMS** This project sought to determine whether advertisements for toddler milk function as de-facto advertising for infant formula in Australia, and whether exposure to these advertisements influences parents' attitudes towards breastfeeding or formula feeding.

**DESIGN** A mixed methods triangulation model was selected to facilitate thorough investigation of a complex public health issue.

**METHODS** Four studies were conducted simultaneously and the results synthesised at the level of analysis. In-depth interviews were conducted to examine expectant mothers' understandings of toddler milk advertisements. Content analysis was used to compare the frequency with which advertisements for various formula products and brands appeared in parenting magazines from countries with differing regulations about the marketing of formula milk products. A cross-sectional survey was conducted to investigate the effect of exposure to toddler milk advertising on attitudes and beliefs about breastfeeding and formula feeding. A series of discussion fora were used investigate the influence of advertising on the infant feeding attitudes and beliefs of parents and those who influence them.

**RESULTS** Mothers expecting a first baby perceived toddler milk advertisements to be advertising infant formula and found their claims that formula brands can confer health benefits similar to those mothers associate with breastfeeding to be believable. Toddler milk advertisements occurred with greater frequency in Australian parenting magazines than they did in those from the UK, USA or Canada. Exposure to toddler milk advertising is associated with more positive attitudes towards formula feeding amongst parents who are not university educated. In the absence of accurate, evidence-based

information about infant formula, mothers, grandmothers and Child and Family Health Nurses rely on advertising to inform their decisions and advice about infant formula.

**CONCLUSIONS** The Marketing in Australia of Infant Formula: Manufacturers' and Importers' Agreement is failing to protect consumers from advertising that minimises the important differences between breastmilk/breastfeeding and formula feeding.

# Table of Contents

Declaration.....	i
Acknowledgements.....	ii
List of Tables.....	x
List of Figures.....	xii
Abbreviations.....	xiii
Definitions.....	xiv
Introduction.....	1
1 The Problem.....	1
2 Project aims.....	2
3 Significance and Originality.....	2
4 Thesis outline.....	3
Background and Literature.....	5
1 infant feeding recommendations.....	5
1.1 The first six months.....	5
1.2 Beyond six months.....	5
1.3 Severance.....	7
2 Health Implications of infant Feeding.....	7
2.1 Infectious disease.....	7
2.2 Non-infectious disease.....	8
2.3 Maternal health and breastfeeding.....	8
2.4 Nutritional and bioactive properties of human milk.....	8
3 Health risks associated with infant formula use.....	10
4 Infant feeding practices.....	15
4.1 Methodological issues.....	15
4.2 Breastfeeding prevalence.....	19
4.3 Breastfeeding intensity in Australia.....	19
4.4 Infant formula use in Australia.....	22
5 Advertising and infant feeding.....	23
5.1 The International Code of Marketing of Breastmilk Substitutes.....	23
5.2 Implementing the International Code.....	24
5.3 The follow-on formula controversy.....	26
5.4 The International Code and Toddler Milk Advertising in Australia.....	29
5.5 Advertising and infant feeding in the literature.....	31
5.5.1 Effects of advertising on infant feeding.....	32
5.5.2 Impediments to the study of the effects of advertising on behaviour.....	38
5.5.3 Historical analysis of advertising and infant feeding trends.....	44
6 Attitudes predict Infant Feeding behaviour.....	46
6.1 Attitudes and behaviour.....	46

6.2	Search strategy .....	47
6.3	Attitudes and infant feeding outcomes .....	47
6.4	Breastfeeding attitudes .....	48
6.5	Formula feeding attitudes .....	49
6.6	Why women breastfeed .....	50
6.7	Implications .....	50
7	Advertising influences Attitudes and behaviour .....	51
8	Conclusion .....	53
	Methodology .....	55
1	Mixed Methods .....	55
1.1	Philosophical framework – What is mixed methods research? .....	55
1.2	The choice - Why mixed methods? .....	56
1.3	The design .....	57
2	Study One– it’s all formula to me .....	58
3	Study Two – the advertisements you have when you’re not having advertisements .....	60
4	study Three – Look at that. it does get in! .....	61
5	Study Four – Relax! you’re soaking in it.” .....	63
6	Summary .....	63
	Study One: “It’s all formula to me” .....	64
1	Introduction .....	64
2	Materials and Methods .....	65
2.1	The stimuli .....	65
2.2	Instrument development .....	71
2.3	Recruitment .....	72
2.4	Data Collection .....	73
2.5	Data Analysis .....	74
2.6	Validity .....	74
3	Results and Observations .....	75
3.1	Demographic characteristics .....	75
3.2	Identifying toddler milk as ‘formula’ .....	76
3.3	Line extension: advertising one product to promote others .....	80
3.4	Positioning formula: ‘pretty close’ to breastmilk .....	83
3.5	Targeting mothers who choose to breastfeed .....	85
3.6	Reassurance .....	91
3.7	Believability .....	92
4	Summary .....	94
	Study Two: The advertisements you have when you’re not having advertisements .....	96
1	Introduction .....	96
2	Aims .....	97

3	materials and Methods .....	97
3.1	Data collection.....	97
3.2	Inclusion criteria.....	98
3.3	Reliability .....	99
3.4	Data analysis .....	101
4	Results.....	101
5	Observations .....	108
	Study Three: “Look at that. It does get in!” .....	111
1	Introduction.....	111
2	Methods.....	113
2.1	Purpose and design.....	113
2.2	Recruitment .....	113
2.3	Sample.....	114
2.4	Instrument.....	114
2.5	Data analysis .....	116
3	Results.....	117
3.1	Socio-demographics .....	117
3.1.1	Gender .....	117
3.1.2	Age .....	117
3.1.3	Marital status .....	118
3.1.4	Income.....	119
3.1.5	Education.....	119
3.1.6	Parity .....	119
3.2	Infant feeding practices .....	120
3.3	Knowledge and acceptance of infant feeding recommendations.....	120
3.4	Attitudes about feeding older babies .....	122
3.5	Peer infant feeding norms.....	123
3.6	Advertising exposure and recall .....	124
3.7	Attitude items .....	127
3.8	Exploratory factor analysis.....	130
3.9	Identification of variables for inclusion in a multiple regression analysis .....	135
3.9.1	Demographics.....	135
3.9.2	Perceived peer norms.....	138
3.9.3	Previous feeding experience .....	139
3.9.4	Acceptance of infant feeding recommendations.....	140
3.9.5	Advertising exposure and recall .....	141
3.10	Multiple regression analysis .....	143
3.10.1	Sub-group analysis .....	144
4	Summary and Observations .....	146

Study Four: “Relax! You’re soaking in it.” .....	152
1 Introduction.....	152
2 Materials and methods .....	152
2.1 Instrument development.....	152
2.2 Recruitment .....	154
2.3 Data collection.....	155
2.4 Data analysis .....	155
2.5 Validity.....	156
3 Results and observations .....	156
3.1 Discussion fora.....	156
3.2 Sources of information .....	157
3.3 Information gap.....	162
3.4 Product identification .....	164
3.5 Response to advertising.....	165
3.6 Product evaluation.....	167
3.7 Professional advice.....	168
4 Summary & observations.....	169
Synthesis and Discussion.....	172
5 Synthesis .....	172
5.1 Confusion or deception?.....	173
5.2 Immersion.....	175
5.3 Subversion.....	176
5.4 Pervasion .....	181
6 Limitations .....	184
7 Conclusions and Recommendations.....	185
References.....	189
Appendices .....	210
1 Appendix One .....	211
2 Appendix Two.....	218

## List of Tables

Number	Title	Page
Table 2.1	Prevalence of breastfeeding in four countries	19
Table 4.1	Demographic characteristics of interview respondents	76
Table 4.2	Product identification	77
Table 4.3	Role of product	78
Table 4.4	Intended breastfeeding duration of respondents who thought toddler formula should be used after breastfeeding had ceased	79
Table 4.5	Responses indicating recognition of pack shots as formula products	81
Table 4.6	Breastfeeding goals and confidence	86
Table 4.7	Main message: Karicare	88
Table 4.8	Main message: Heinz & Wyeth	89
Table 4.9	Reassurance	92
Table 4.10	Believability	94
Table 5.1	Formula advertising coding frame	99
Table 5.2	Frequency of formula advertisements by type	102
Table 5.3	Mean ratios of all formula advertisements to pages of all advertising and of formula milk advertisements to pages of advertising by regulatory environment	107
Table 5.4	Mean ratio of all formula advertisements to pages of advertising	108
Table 6.1	Acceptance of recommended breastfeeding duration	121
Table 6.2	Attitudes about feeding older babies	122
Table 6.3	Peer norms	123
Table 6.4	Product advertising recognition	125
Table 6.5	Advertising message recognition	126
Table 6.6	Responses to attitude items	128
Table 6.7	Proportion of those who believe breastfed babies are healthier than formula fed babies	129
Table 6.8	Pattern matrix with eigenvalues	133
Table 6.9	Factor correlations	135
Table 6.10	Unstandardised ( $B$ ) and standardised ( $\beta$ ) regression co-efficients, and squared semi-partial (or 'part') correlations ( $sr^2$ ) between demographic variables and attitude towards formula feeding	136
Table 6.11	Unstandardised ( $B$ ) and standardised ( $\beta$ ) regression co-efficients, and squared semi-partial (or 'part') correlations ( $sr^2$ ) between advertising variables and attitude towards formula feeding	142
Table 6.12	Unstandardised ( $B$ ) and standardised ( $\beta$ ) regression coefficients, and squared semi partial correlations ( $sr^2$ ) for a multiple regression predicting attitudes towards formula feeding	144

## List of Tables Continued

<b>Number</b>	<b>Title</b>	<b>Page</b>
Table 6.13	Unstandardised ( $B$ ) and standardised ( $\beta$ ) regression coefficients, and squared semi partial correlations ( $sr^2$ ) for a multiple regression predicting attitudes towards formula feeding amongst respondents who were <i>not</i> university educated	146
Table 7.1	Sources of information about infant formula: health professionals	158
Table 7.2	Sources of information about infant formula: grandmothers & other mothers	159
Table 7.3	Sources of information about infant formula: advertising	160
Table 7.4	Packaging not regarded as advertising	162
Table 7.5	Advertising messages	166
Table 7.6	Appeal of graphics in product selection	167

## List of Figures

<b>Number</b>	<b>Title</b>	<b>Page</b>
Figure 2.1	WHO Infant Feeding Indicators	17
Figure 2.2	Infant feeding questions	21
Figure 2.3	Proportion of infants aged 3 months or less currently breastfeeding and receiving formula and solids (ABS 2003)	22
Figure 2.4	Milupa Aptamil First Infant Formula & Milupa Aptamil Follow-on (UK)	29
Figure 2.5	Wyeth S26 Gold Alpha Pro infant formula & S26 Gold Toddler	31
Figure 2.6	Nutricia Karicare Gold PLUS From Birth infant formula & Nutricia Karicare Gold PLUS Toddler	31
Figure 4.1	Nutricia Karicare Gold PLUS Toddler advertisement	67
Figure 4.2	Heinz Nurture Gold Toddler advertisement	68
Figure 4.3	Wyeth S26 Gold Toddler advertisement	70
Figure 4.4	Pilot Interview Questions	71
Figure 4.5	Final Interview Guide	72
Figure 6.1	Age profile of respondents	118
Figure 7.1	Discussion Protocol	153

## Abbreviations

<b>AAP</b>	American Academy of Pediatrics
<b>AAFP</b>	American Academy of Family Physicians
<b>ACOG</b>	American College of Obstetrics and Gynecology
<b>ADA</b>	American Dietetic Association
<b>APMAIF</b>	Advisory Panel on the Marketing in Australia of Infant Formula
<b>BFHI</b>	Baby Friendly Hospital Initiative
<b>CDC</b>	Centers for Disease Control
<b>EC</b>	European Community
<b>IFMC</b>	Infant formula manufacturing company
<b>IIFAS</b>	Iowa Infant Feeding Attitudes Scale
<b>International Code</b>	The International Code of Marketing of Breastmilk Substitutes and subsequent relevant resolutions of the World Health Assembly
<b>LRTI</b>	Lower Respiratory Tract Infection
<b>MAIF Agreement</b>	Marketing in Australia of Infant Formula: Manufacturers' and Importers' Agreement
<b>MLR</b>	Multiple Linear Regression
<b>NHMRC</b>	National Health and Medical Research Council
<b>NHS</b>	National Health Survey
<b>NSW</b>	New South Wales
<b>ORS</b>	Oral Rehydration Solution
<b>PIFSII</b>	Perth Infant Feeding Study II
<b>PHAA</b>	Public Health Association of Australia
<b>PHAP</b>	Pharmaceutical and Healthcare Association of the Philippines
<b>QLD</b>	Queensland
<b>RACP</b>	Royal Australasian College of Physicians
<b>RCM</b>	Royal College of Midwives
<b>UK</b>	United Kingdom
<b>UKDoH</b>	United Kingdom Department of Health
<b>UNICEF</b>	United Nations Children's Fund
<b>USA</b>	United States of America
<b>USDHHS</b>	United States Departments of Health and Human Services
<b>WHA</b>	World Health Assembly
<b>WHO</b>	World Health Organization
<b>WIC</b>	Special Supplemental Nutrition Program for Women Infants and Children

## Definitions

<b>Bottle feeding</b>	Infant is fed infant formula from an infant feeding bottle
<b>Exclusive breastfeeding/ Exclusively breastfed</b>	Infant must be fed human milk either from the mother, a wet nurse or a donor directly or from an infant feeding device. Infant may also be fed oral rehydration solution, medicines, vitamins or minerals. Infant must not be fed anything else.
<b>Follow-on formula</b>	A product based on milk or other edible food constituents of animal or plant origin, which is nutritionally adequate to serve as the principal liquid source of nourishment for an infant less than six months old.
<b>Formula milk</b>	Any powdered milk product that shares a brand identity and identical packaging with an infant formula product
<b>Brand extension</b>	The use of an established product's brand identity for a new product in a different product category
<b>Formula product</b>	Any milk product that shares a brand identity with an infant formula product
<b>Full breastfeeding/ Fully breastfed</b>	Infant is fed human milk as the predominant source of nourishment. Infant may also be fed oral rehydration solution, medicines, vitamins or minerals, water based drinks (eg tea) or fruit juice. Infant must not be fed anything else, particularly non-human milk, infant formula or other food-based fluids. This definition includes exclusively breastfed infants.
<b>Formula brand</b>	Brand identifiers that are associated with an infant formula product
<b>Growing up milk</b>	Liquid milk, often fortified, that shares a brand identity with an infant formula product. Represented as suitable for children more than a year old.
<b>Infant</b>	A person less than 12 months old.
<b>Infant formula</b>	A product based on milk or other edible food constituents of animal or plant origin, which is nutritionally adequate to serve as the sole diet of an infant less than six months old.
<b>Line Extension</b>	The use of an established product's brand identity for a new product in the same product category.
<b>Mixed feeding</b>	Infant is fed a combination of human milk (either at the mother's breast or from an infant feeding device) and infant formula. Infant may also be fed other foods and/or fluids.
<b>Product category</b>	A group of products that meet a general need. For example, 'soft drink' and 'infant nutrition' and 'health and beauty' are product categories.
<b>Product line</b>	A set of related products sold by the same company bearing a single brand identity.
<b>Toddler milk</b>	Powdered milk of animal or plant origin, often fortified, that shares a brand identity with infant formula, and is presented in packaging that is identical in size and shape to an infant formula product. Represented as suitable for children more than a year old.