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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

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*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 to 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.

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## 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.