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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

22nd March 2010



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All I have needed Thy hand hath provided ...

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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.

RESULTSMothers 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

AAP American Academy of Pediatrics

AAFP American Academy of Family Physicians

ACOG American College of Obstetrics and Gynecology

ADA American Dietetic Association

APMAIF Advisory Panel on the Marketing in Australia of Infant Formula

BFHI Baby Friendly Hospital Initiative

CDC Centers for Disease Control

EC European Community

IFMC Infant formula manufacturing company
IIFAS Iowa Infant Feeding Attitudes Scale

International The International Code of Marketing of Breastmilk Substitutes and subsequent

Code relevant resolutions of the World Health Assembly

LRTI Lower Respiratory Tract Infection

MAIF Marketing in Australia of Infant Formula: Manufacturers' and Importers'

Agreement Agreement

MLR Multiple Linear Regression

NHMRC National Health and Medical Research Council

NHS National Health Survey

NSW New South Wales

ORS Oral Rehydration Solution

PIFSII Perth Infant Feeding Study II

PHAA Public Health Association of Australia

PHAP Pharmaceutical and Healthcare Association of the Philippines

QLD Queensland

RACP Royal Australasian College of Physicians

RCM Royal College of Midwives

UK United Kingdom

UKDoH United Kingdom Department of Health

UNICEF United Nations Children's Fund

USA United States of America

USDHHS United States Departments of Health and Human Services

WHA World Health AssemblyWHO World Health Organization

WIC Special Supplemental Nutrition Program for Women Infants and Children



Definitions

Bottle feeding Infant is fed infant formula from an infant feeding bottle

Exclusive breastfeeding/ **Exclusively breastfed**

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.

Follow-on formula 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.

Formula milk Any powdered milk product that shares a brand identity and identical

packaging with an infant formula product

Brand extension The use of an established product's brand identity for a new product in

adifferent product category

Any milk product that shares a brand identity with an infant formula Formula product

product

Full breastfeeding/ **Fully breastfed**

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.

Formula brand Brand identifiers that are associated with an infant formula product

Growing up milk Liquid milk, often fortified, that shares a brand identity with an infant

formula product. Represented as suitable for children more than a year

Infant A person less than 12 months old.

Infant formula 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.

Line Extension The use of an established product's brand identity for a new product in

the same product category.

Mixed feeding 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.

Product category A group of products that meet a general need. For example, 'soft

drink' and 'infant nutrition' and 'health and beauty' are product

categories.

Product line A set of related products sold by the same company bearing a single

brand identity.

Toddler milk 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.

