

## **Toddler Milk Advertising in Australia: the Infant Formula Ads we have when we don't have Infant Formula Ads**

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### **Abstract**

The Marketing in Australia of Infant Formula: Manufacturers' and Importers' Agreement (MAIF) prevents manufacturers and importers from advertising infant formula. However, toddler milks, which share brand identities with infant formula, are advertised freely; and recent research suggests consumers fail to distinguish between advertising for infant formula and for toddler milk. This study examined whether Australian parents recalled having seen advertisements for 'formula'. Most respondents (66.8%) reported seeing an advertisement for infant formula, with those who had only seen non-retail advertising more than twice as likely to believe that they had seen such an advertisement as those who had only seen retail advertising. This suggests that toddler milk advertisements are functioning as defacto infant formula advertisements in Australia. Thus the MAIF is failing to achieve its stated purpose.

## Introduction

Infant formula use is increasing amongst Australian mothers (Australian Bureau of Statistics 2003) in spite of public health recommendations that infants should be fed nothing but human milk for the first six months of life, and continue consuming human milk in addition to complementary feeding until they are at least a year old (NHMRC 2003). There is clear evidence of a dose-response effect of infant formula use that persists throughout the life course (Horta et al. 2007; Ip et al. 2007). Furthermore data collected for the Millennium Cohort Study (in the UK) established a causal relationship between exposure to infant formula and hospitalisation for gastroenteritis and lower respiratory tract infection by controlling for other foods the infant had consumed. This study clearly demonstrated that it is not deprivation of breastmilk (as in the case of breastfed infants also fed solid foods prematurely) but exposure to formula milk that is associated with hospital admission (Quigley et al. 2009).

In recognition of the role of the marketing of breastmilk substitutes in the worldwide decline in breastfeeding, the World Health Assembly devised the International Code of Marketing of Breastmilk Substitutes (WHA 34.22 1981). This resolution, which was supported by the Australian Government, calls on national governments to prohibit the advertising of infant feeding products to the general public on the grounds that it is unethical because it undermines breastfeeding (Baumslag and Michels 1995; Minchin 1998; Palmer 2009; Richter 2001).

In response to WHA 34.22, the infant formula industry in Australia has entered into a voluntary agreement (MAIF) with the Government of Australia by which it agrees to refrain from advertising infant formula products represented as suitable for children who are less than a year old. The MAIF Agreement is monitored by an advisory panel (the APMAIF), which consists of a public health nutritionist, a lawyer, a community representative and a representative of infant formula industry's peak body. The MAIF Agreement does apply to retailer advertising. (The APMAIF has defined retailer advertising as advertising that contains only a pack shot and price information.) The APMAIF found no breaches of the MAIF Agreement in the five years prior to the study. Therefore, it is reasonable to conclude that there have been no infant or follow-on formula advertisements (apart from those which contain only pack shots and prices) since 2003.

Since the introduction of the MAIF Agreement prohibiting the advertising of both infant and follow-on formulas, 'toddler milks' (also known as 'toddler formula', 'growing-up-milk', 'GUM' or '1-2-3 milk') have been introduced to the Australian market. The presentation of these products displays an obvious similarity to that of follow-on formulas in that although toddler milks are modified powdered milk products not suitable for use as the sole diet of an infant, they are presented in packaging that is nearly identical to that of infant formulas. Toddler milk packages generally bear the same brand identifiers and design features as infant formula but include the word 'toddler' in the product name. For example, Wyeth produces infant formulas called 'S-26 Gold Alpha Pro' and 'S26 Gold Progress'. Its toddler milk is called 'Wyeth S-26 Gold Toddler'. The MAIF agreement places no restriction on the advertising of toddler milks.

Qualitative research suggests that Australian mothers do not draw a distinction between toddler milk and infant formula, referring to both products as 'formula' and

when are shown toddler milk advertisements, they believe them to be advertising infant formula products. Furthermore they uncritically accepted advertisers' claims that these formula products are healthy or beneficial to a child's health (Berry et al. 2010). These messages are not consistent with the large body of evidence that demonstrates an association between the use of infant formula (or any other breastmilk substitute) and significant health risks (Horta et al. 2007; Ip et al. 2007; Quigley et al. 2009; Stuebe 2009).

This study investigated whether the perception that toddler milk advertising promotes infant formula is prevalent amongst Australian parents by determining whether they recalled seeing advertisements for infant formula products – in spite of the provisions of the MAIF Agreement – and what messages they remembered these advertisements containing.

## **Methods**

A convenience sample of 439 parents of a child less than 5 years old, or who were expecting a child, was recruited by intercept over two days at the 2008 Pregnancy, Babies and Children (PCB) Expo in Sydney. Respondents completed a survey instrument, developed for this study in consultation with experts in the fields of infant feeding and survey research.

Respondents who indicated that they had seen 'formula' advertised, were asked to indicate which, if any, of five infant formula products depicted in full colour on the survey they had seen advertised (Heinz Nurture Gold Starter, Nutricia Karicare Gold Plus From Birth, Bellamy's Organic Infant Formula; Nestle Nan 1 Gold Starter and Wyeth S26 Gold Alpha Pro). Infant formula pack-shots were used in order to provide confirmation of whether respondents believed they had seen infant formula advertised and these were reproduced at approximately the same size as pack shots that appear in Australian toddler milk advertisements.

Respondents were then asked to indicate which, if any, of seven advertising claims (is like breastmilk, is convenient, makes babies healthy/happy, improves brain development/ contains nutrients such as omega 3, iron or probiotics, ensures proper growth and development) were made about the product(s) they had seen advertised. These claims were drawn from mothers' responses to toddler milk advertisements (Berry et al. 2010). Variations of these claims appeared in advertisements for toddler milks that were in circulation during 2007. For example, a Heinz Nurture Gold Toddler advertisement contained the text "Formulated with NPD, a unique scientific combination of nutrients, it includes pre and pro-biotics and more Omega 3 DHA than any other ..."; a Nutricia Karicare Gold PLUS Toddler advertisement began with the banner headline "How to support your toddlers' immunity" and moved on to claim that "Probiotics, found naturally in breast milk, help children build immunity against infection and allergy Mums can now ensure toddlers benefit from probiotics when they use Karicare Toddler GOLD plus"; and a Wyeth S26 Gold Toddler advertisement stated "S26 Toddler GOLD, with the advanced Wyeth Biofactors System, provides an age appropriate combination of nutrients to help support their cognitive, visual and physical development".

In order to ascertain whether respondents had seen retailer advertisements for infant formula or commercial advertisements, they were also asked where they had seen the products advertised (tv, magazine, brochure, expo conference, sample bag, catalogue, somewhere else) and what types of formula they had seen advertised (suitable from birth, suitable from 4-6months, suitable from 12 months).

In consideration of the time taken to complete the survey, respondents were given the opportunity to win a \$400 gift voucher from a major retail chain. Survey responses were provided anonymously and the study received approval from the university's Human Research Ethics Committee.

## **Results**

Most (82.7%) respondents were female, aged between 24 and 35 years (81.1%), married or living with a partner (95.3%) and with an average household income between \$25,000 and \$75,000pa. The age, marital status and income profile of the sample reflect the pattern observed in national census data (Laws and Hilder 2008). However, parents who held either undergraduate or postgraduate qualifications were slightly over-represented in the sample (51.7%) compared with the population of NSW parents (Donath and Amir 2008). Most respondents (85.3%) were the parents of one or more children and the remainder (14.7%) were expecting a first child. Both breastfeeding (89.2%) and formula feeding (76.2%) were very common amongst parents. (These figures add to well over 100% as the majority of parents reported both formula feeding and breastfeeding.)

### **Advertising Exposure**

Almost all respondents (92.1%) reported that they had seen an advertisement for 'formula'. Of those, 93.3% indicated that they had seen an advertisement that did not originate from a retailer (i.e., not in a supermarket or pharmacy catalogue). Fewer than half the respondents (44.5%) indicated that they had seen formula advertised by retailers.

In order to determine whether those parents whose babies had been fed infant formula were more likely to recall having seen a 'formula' advertisement (perhaps as a justification for their own behaviour), two contingency table analysis was conducted. No significant relationship was found.

Most respondents (66.8%) reported that they had seen a formula product suitable for use from birth (infant formula) advertised. Fewer than half (45.1%) indicated that they had seen a formula product suitable from 4-6 months (follow-on formula) advertised. More than half (55.9%) reported that they had seen a formula product suitable from 12 months (toddler milk) advertised. Almost all respondents (91.0%) indicated that they had seen advertisements for at least one of the infant formula products depicted on the survey.

In order to determine whether those parents whose babies had been fed infant formula were more likely to report having seen an advertisement *infant* formula advertisement, a contingency table analysis was conducted. No significant relationship was found.

In order to ascertain whether advertisements for toddler milk and other products are commonly understood to be advertisements for infant formula, a contingency table analysis was conducted to establish whether there was a significant relationship between the type of advertisements respondents had seen (retail or non-retail) and having reported seeing an advertisement for infant formula (as retailers are not party to the MAIF Agreement, they are allowed to advertise infant formula using pack shots and price information). In order to determine whether the type of advertisement seen affected whether respondents believed they had seen an advertisement for infant formula, respondents who reported having seen both retail and non-retail formula ads were excluded from this analysis. A significant relationship was found between the variables,  $\chi^2(df = 1, n=238) = 19.423$ . More than twice as many respondents who indicated they had seen *only* non-retail formula advertisements (67.0%) believed that they had seen an advertisement for infant formula as those who indicated they had *only* seen a retail formula advertisement (28.9%).

Close to three quarters (74.3%) of respondents believed that they had seen an advertisement for Wyeth S26 Alpha Pro infant formula and a similar proportion (72.8%) believed they had seen an advertisement for Karicare Gold Plus Infant Formula. More than half (52.1%) believed they had seen an advertisement for Heinz Nurture Gold Starter infant formula and more than a third (35.0%) believed they had seen an advertisement for Nestle Nan 1 Gold Starter infant formula. Just over a fifth (21.5%) believed they had seen Bellamy's Organic Step 1 Infant Formula. On average respondents indicated that they had seen 2.5 infant formula products advertised.

More than 90% of respondents recognised at least one advertising message. On average, respondents recognised 2.6 advertising messages. Sixty-nine point nine percent of respondents indicated that the formula advertisement(s) they had seen claimed that the product contained nutrients such as omega 3, iron or probiotics. More than half (52.9%) indicated that they had seen a formula advertisements claiming that the product ensures proper growth and development. A third (32.9%) indicated that they had seen a formula advertisement claiming that the product improves babies' brain development. Almost a third indicated they had seen an advertisement claiming that a formula product could make babies happy/healthy (30.6%) or that it was convenient (29.1%). More than one in four respondents indicated they had seen a formula advertisement claiming that the product 'is like breastmilk' (27.1%) or 'strengthens immunity' (25.1%). Many of these messages also appear on infant and/or follow-on formula packaging.

## Discussion

Exposure to advertising for formula products approached universality amongst respondents and yet none of the hundreds of complaints received by the APMAIF since 2002/3 have been deemed to be infant or follow-on formula and therefore in violation of the Agreement (Knowles 2003; Advisory Panel on the Marketing in Australia of Infant Formula 2004; 2005; 2008; 2009).

Most respondents had seen advertisements that did not originate from a retailer. Since there have been no breaches of the MAIF Agreement reported since 2002/3, these

advertisements were almost certainly advertisements for toddler milk and were certainly not advertisements for infant formula. Even so, 67% of those who had only seen non-retail advertisements reported that they believed they *had* seen an advertisement for infant formula. This result is consistent with the results of British research which found around 60% of mothers and expectant mothers thought follow-on formula advertising was promoting infant formula (National Childbirth Trust/ Unicef UK 2005; NOP World for Department of Health 2005) and is a clear indication that advertisements for toddler milks are widely understood to be advertising infant formula – and therefore functioning as defacto infant formula advertisements.

This conclusion is supported by the observation that almost all of the respondents who reported having seen formula advertised reported that they had seen an advertisement for at least one of five infant formula products depicted on the survey. The products depicted on the survey were selected because they are part of product lines which include infant and follow-on formula as well as toddler milk. As such they share brand identifiers with toddler milk. The brand identifiers link toddler milk so strongly to the same brand of infant formula that respondents believed that they had seen advertisements for infant formula products even though most of them could not have. In fact, respondents who had seen only advertisements that could *not* have depicted infant formula (and were almost certainly toddler milk advertisements) were more than twice as likely to believe that they had seen infant formula advertised as those who had only seen retail advertisements that could have depicted infant formula. Furthermore, a large proportion of respondents recognised advertising messages as messages they had seen in formula advertising.

The nature of the advertising messages recognised by respondents demonstrated the potential this advertising has to undermine breastfeeding promotion. One in four respondents reported having seen formula advertising claiming that formula ‘strengthens immunity’ and one in three a formula advertisement claiming that formula ‘improves brain development’. These advertising messages undermine public health messages and mislead consumers by minimising the differences between infant formula and human milk; misrepresenting the weight of available scientific evidence and presenting formula as healthy, benign alternative to breastfeeding. This is likely to make mothers more comfortable with the use of infant formula. Recent research suggests that women who are more comfortable with the idea of formula feeding (measured antenatally) are less likely to intend to breastfeed or breastfeed exclusively (ie avoid infant formula) than women who are less comfortable with the idea of formula feeding (Nommsen-Rivers et al. 2010).

The research reported in this paper suggests that the MAIF Agreement is failing to achieve its stated purpose, ‘to contribute to the provision of safe and adequate nutrition for infants by the protection and promotion of breastfeeding’. Since industry self-regulation has failed to protect Australian mothers and infants as recommended by the WHO, it is recommended that consideration be given to enacting legislation that prohibits the advertising of any and all products or services that share a brand identity with infant formula – including toddler milks.

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