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## **Mammary malfunction: a comparison of breastfeeding and bottlefeeding product ads with magazine article content**

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MAMMARY MALFUNCTION:  
A COMPARISON OF BREASTFEEDING AND BOTTLEFEEDING  
PRODUCT ADS WITH MAGAZINE ARTICLE CONTENT

A Thesis

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Master of Mass Communication

in

The Manship School of Mass Communication

by  
Angela Broussard Hyderkhan  
B.S., Louisiana State University, 1998  
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## **ABSTRACT**

Breastfeeding is a pressing social issue in terms of women's equality, preventative healthcare, and the preservation of a valuable natural resource. Future progress in breastfeeding advocacy will depend on an accurate investigation into the current situation. In this study, three women's prenatal magazines (*American Baby*, *ePregnancy*, and *Parenting*) are analyzed via content analysis for one calendar year, looking specifically at infant formula-related product advertisements, breastfeeding-related product advertisements and variations of the mother's role in infant feeding. The content of breastfeeding-related magazine articles also is analyzed within the context of the advertisements. This sample of media appears to have evolved away from negative stereotypes about breastfeeding being primitive, disgusting, cow-like, or an excretory function. However, breastfeeding product advertisements were found to cater to negative stereotypes more than infant formula product advertisements. The amount of product advertising was not influential in the positive or negative representation of breastfeeding within article content.



## INTRODUCTION

While sitting on the Washington, DC, Metro, a young mother and her small child took a seat directly in front of me. The infant screamed with hunger, and the mother fed her baby with her breast instead of a bottle. Embarrassed, I looked away and felt sorry for them. The doors opened and I rushed off to work.

The moment was a flash in time. I did not think about it again until I discovered that I was pregnant and began reading prenatal literature. I quickly realized why that woman on the Metro breastfed instead of bottle-fed. I began to question the nature of my reaction to her breastfeeding. Why did I think breastfeeding should be done in private? Why was I embarrassed about seeing a breast—a part of the body flaunted habitually for commercial purposes? Why did I feel sorry for the woman, thinking that she was forced to breastfeed because of her economic situation? Why did I not know of breast-milk's superiority to infant formula?

Naomi Baumslag and Dia Michels, (1995) announced in their book *Milk, Money, and Madness: The Culture and Politics of Breastfeeding* that “Breastfed babies are healthier, have fewer hospitalizations, and have lower mortality rates than formula-fed infants” (p. xxiii). Medical journals have added to the body of research that states simply and emphatically that breast-milk's health and developmental benefits far surpass artificial infant formula. Breast-milk reduces incidences of Sudden Infant Death Syndrome (SIDS), dental and vision problems, ear infections, obesity, diabetes, gastrointestinal illnesses, diarrhea, and childhood cancer, particularly lymphoma (Mephram, 1991, p. 31; see also Fredrickson, et al., 1993; Duncan, et al., 1993). In addition, breast-milk passes immunological benefits from mother to child—a process that is impossible to

reproduce synthetically by infant formula (Briend, Wojtyniak, & Rowland, 1988; Hamosh, 2001; Hanson, Korotkova, & Telemo, 2003; Wang & Wu, 1996). Breastfeeding also has been shown to improve infants' intellectual and social development (Bauer, et al., 1991; Baumgartner, 1984; Makrides, et al., 1994; Mortensen, et al., 2002; Rodgers, 1978; Temboury, et al., 1994). And, because "Lactation is an integral component of the reproductive process" it decreases the mother's fertility and post-partum weight along with a reduced incidence of osteoporosis, and breast, endometrial, ovarian, and uterine cancers (Mephram, 1991, p. 31; see also Dewey, Heinig, & Nommsen, 1993; Diaz, et al., 1982; Freudenheim, et al., 1994; Lee, et al., 2003; Newcomb, et al., 1994; Yoo, et al., 1992; Zheng, et al., 2000; Petterson, et al., 1986; Rosenblatt, Thomas, & WHO, 1993; Brock, et al., 1989). Breastfeeding is also "a newborn's first experience of empowerment" because the infant is active and in control of the process (Mephram, 1991, p. 31; see also Van Esterik, 1989).

The body of medical evidence supporting breast-milk's beneficial properties for both mother and child and its superiority to artificial formula is so well documented, that it requires no further justification. Like the case with smoking and obesity, preventative healthcare will remain a controversial topic. It demands attention because a mother's decision not to breastfeed could cost society in future insurance increases due to the expanding costs of providing healthcare to a generally less healthy world society:

...If breastfeeding were fully reinstated in developing countries, ten million children could be saved from diarrhea disease and malnutrition each year. If every newborn in the United States were breastfed for just twelve weeks, the health care savings from avoiding nonchronic diseases in babies' first year of life would amount to \$2 – 4 billion annually....An analysis of costs incurred because of the expense of infant formula and the extra costs in health care that result from formula-related illnesses around the world indicates that universal breastfeeding could produce an

estimated savings of over \$333 billion annually (Baumslag & Michels, 1995, pp. xxiii, 70-71).

In addition to costing society much more in healthcare, infant formula-feeding's toll on the environment and foreign exchange is stupendous. Advertising encourages consumption and demands production which is destructive to the environment. For example, advertising opposes environmentalism "because it promotes wasteful consumption, yet glamorizes this consumption to avoid making people feel uncomfortable or self-conscious about being wasteful" (Shasser, 1989; referenced in Frith, 1995, p. 195).

Numerous studies have been conducted on the ecological and economical impact of bottlefeeding and its toll on the environment from tin, pharmaceutical, and wood waste along with its financial burden on impoverished nations (Greiner, Almroth, & Latham, 1979; referenced in Radford, 1991). With the importing of infant formula, countries must also acquire additional necessary equipment such as bottles and nipples; this often becomes "a profligate use of scarce foreign exchange" (Mephram, 1991, p. 34).

For example, Indonesian mothers' milk was conservatively estimated at \$400 million market value with an added U.S. \$120 million in health and fertility reduction savings, "Making breastmilk one of Indonesia's most precious resources, exceeding the gross monetary value of tin and coffee and approaching that of rubber" (Mephram, 1991, p. 34; see also Palmer, 1988).

While the health and developmental benefits for both mother and child indicate the many advantages of breastfeeding, there are disadvantages. Human error, premature birth, physical separation of mother and baby in hospital nurseries, leaking, embarrassment in public, laws and restrictions on nursing in public, pain and discomfort

are all disadvantages that breastfeeding women may or may not encounter. The advantages of infant formula include medical emergencies, physical separation, and, the overall acceptance of the general public.

Simple definitions of breastfeeding and bottlefeeding, obtained from Webster's dictionary, are illustrative of the general situation. Breastfeed is defined: "To feed (a baby) from a mother's breast *rather than from a bottle* [author's italics]. Bottle-feed, on the other hand, is defined: "To feed (as an infant) with a bottle" (Merriam-Webster On-Line, 2004). Dictionary editors felt compelled to distinguish breast rather than bottle, indicating how even simple forms of communication like a definition reveal how the artificial has become more expected than the original, bottle expected over breast.

Everett M. Rogers (1971) once stated that:

Perhaps all analyses of social change must ultimately center primary attention upon communication processes. In fact, all explanations of human behavior directly stem from an examination of how individuals acquire and modify ideas through communication with others (p. 11).

Via Rogers's advice, an examination of corporate and pro-social advertising communication will shed light on breastfeeding behavior. A study evaluating the competing messages in the popular media will provide a general, empirical picture of messages received by pregnant women in our country.

Super Bowl 2004 ignited the breast controversy after pop singers Janet Jackson and Justin Timberlake's "wardrobe malfunction," in which Jackson's right breast was exposed to the stadium and television audiences. The now infamous wardrobe malfunction was one of highest scoring events ever in TiVo history (Sutherland, 2004). The Federal Communications Commission (FCC) levied a total of \$550,000 in fines for all 20 of CBS-owned television stations that aired the incident (Kerr, 2004). Prompted by

a record number of over 500,000 complaints to the FCC, this was the largest fine ever levied against a television broadcaster (Kerr, 2004). The enforcement of stricter regulations for indecency, legislative bills for even higher fines, and a move away from live television to 10-second delays were all in the months to follow. As a result, the breast taboo literally took center stage once again.

Breastfeeding advocacy on a national level coincidentally experienced a renaissance in the year 2004. The U.S. Office of Women's Health, part of the Department of Health and Human Services, was due to launch "Babies were born to breastfeed," a national breastfeeding awareness campaign. The well-funded social marketing campaign attempted to compete with the established body of corporate infant formula advertising. A brief description of the campaign serves not only as a springboard to the contrasting messages women receive about breastfeeding but the "Babies were born to breastfeed" ad campaign also illustrates the utter lack of vocabulary in society surrounding the breast/bottle decision dilemma.

The initial plan for the "Babies were born to breastfeed" campaign indicated that "Women who don't breastfeed are taking risks they'd never consider during pregnancy," citing statistics and medical evidence that formula-fed babies are at an increased risk of developing earaches, diarrhea, asthma, leukemia, and juvenile diabetes (Edwards, 2003; Petersen, 2003).

The ad spots featured pregnant women riding a mechanical bull and competing in a log-rolling contest (Petersen, 2003). After the Department of Health and Human Services Secretary Tommy Thompson received complaint letters from the American Academy of Pediatrics (AAP) and the makers of Enfamil and Similac, the ads were

pulled; the campaign took a hiatus, re-emerging with a different appeal. “Babies were born to breastfeed” was not re-launched until July 2004; its focus changing from the dangers of infant formula-feeding to the benefits of breastfeeding. However, the first breastfeeding campaign known as “Breast is best,” launched by the U.S Department of Agriculture in August 1997, already illustrated how the “feel-good” led only to failure (Nadesan & Sotirin, 1998, p. 217).

The AAP and infant formula manufacturers argued that the ads put an unnecessary burden of guilt on mothers who choose not to breastfeed. Amy Spangler, spokesperson for a breastfeeding advocacy organization complained that political correctness and paternalistic notions of “protecting women” from feelings of guilt do not belong in any dialogue concerning infant health:

We don’t hesitate to tell people the consequences of not using a seat belt, the consequences of not putting your child in a car seat, of not putting a bicycle helmet on them....why is it that we hesitate to tell people what the consequences of not breast-feeding are (Edwards, 2003)?

Spangler’s criticism against this notion of protecting women from guilt was further supported by Hausman (2000), who concluded that there is no support for the position that denying mothers information avoids making them feel guilty: “In the dozens of reports on efforts to increase breastfeeding among many cultures, there is no report of producing guilt feelings” (p. 283; see also Lawrence, 1994).

In addition to using ineffective fear and guilt appeals, the Department of Health and Human Services also added to the quasi-sexual innuendo associated with breastfeeding stereotypes. In the R&B radio spot, for example, the announcer’s voice sounds eerily similar to Barry White while asking the woman in question to “Turn the

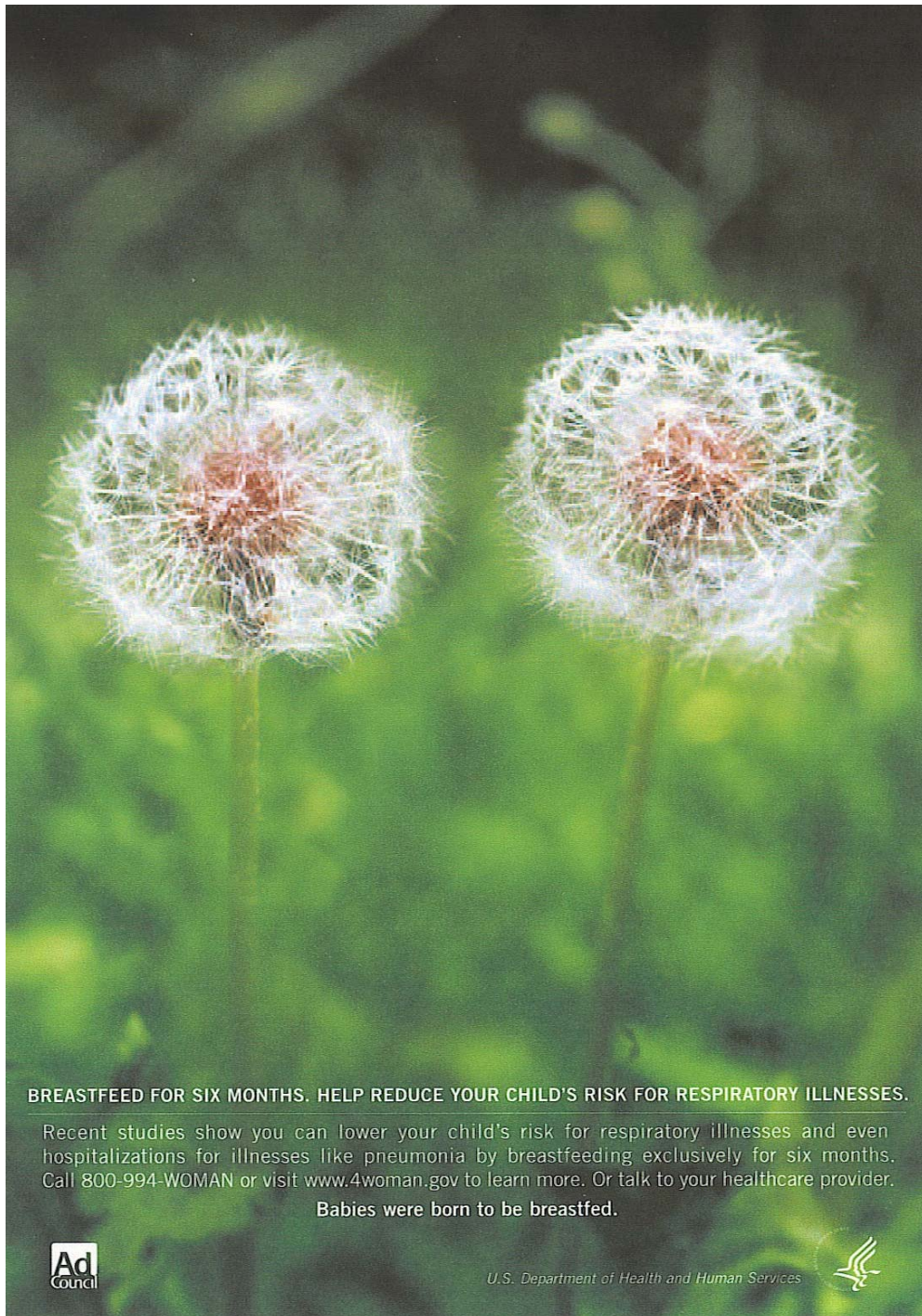
lights down low...Baby.” Nadesan and Sotirin (1998) summarized the “nasty” or quasi-sexual view of breastfeeding:

Taken together, these images represent breast-feeding as a private, reproductive activity contained within the patriarchal household and as a visual spectacle of the consumption of the female breast, where the androgynous infant merely serves as a substitute for the male viewer whose heterosexual desire has dictated the camera angles, poses, and color tones of the images (pp. 223 – 224).

The country version of the “Babies were born to breastfeed” radio Public Service Announcements (PSAs) also added to misconceptions about breastfeeding. In this country spot, the announcer removes breastfeeding mothers from city offices and throws them a few feminists’ movements back to plowing the fields—hardly the reality of most modern-day nursing mothers. Elizabeth Wilson (1991) described how women’s presence in cities has always been problematic because of their contested sexuality: “...in need of either protection or control...” (p. 6; quoted in Bartlett, 2000, p. 118).

Rather than showing a mother actually breastfeeding on print PSAs, the U.S. Government’s breastfeeding awareness campaign pictured breasts symbolically, through pairs of dandelions and cherry-topped ice cream cones (see Figures 1 and 2). Such visual suggestions would be an appropriate addition to Wilson Bryan Key’s standing repertoire of subliminal sex appeals (Key, 1980). There is no wonder women feel confused if the very government department that is supposed to promote the act of breastfeeding does not picture a mother in the act of actually nursing her infant.

In fact, the picture of a mother in the act of nursing her child has virtually escaped modern society with the exception of museum displays of Renaissance masterpieces. And, when the rare sight does occur, it usually ignites controversy. The breast itself cannot be the scandal, though; breasts are paraded around all aspects of modern society.



**Figure 1. Dandelions.** PSA obtained from the Breastfeeding Awareness campaign conducted by the Ad Council and the U.S. Department of Health and Human Services. Available On line at [http://www.adcouncil.org/pdf/breastfeeding\\_print\\_dandelions.pdf](http://www.adcouncil.org/pdf/breastfeeding_print_dandelions.pdf)





**BREASTFEED FOR 6 MONTHS. YOU MAY HELP REDUCE YOUR CHILD'S RISK FOR CHILDHOOD OBESITY.**

Recent studies show babies may be less likely to develop childhood obesity when exclusively breastfed for six months. Call 800-994-WOMAN or visit [www.4woman.gov](http://www.4woman.gov) to learn more. Or talk to your healthcare provider.  
**Babies were born to be breastfed.**



U.S. Department of Health and Human Services



**Figure 2. Ice Cream.** PSA obtained from the Breastfeeding Awareness campaign conducted by the Ad Council and the U.S. Department of Health and Human Services. Available On line at [http://www.adcouncil.org/pdf/breastfeeding\\_print\\_icecream.pdf](http://www.adcouncil.org/pdf/breastfeeding_print_icecream.pdf)

If it is not the sight of flesh during breastfeeding that offends, could it possibly be the non-sexual intimacy? This relationship between nursing mother and feeding child is confusing to a society who's value of breasts are centered on sexuality, male pleasure, and product promotion. Even the advertising of breastfeeding products entails conflicting messages. When breastfeeding is discussed in the media, the message is equally as confusing. The reason, I propose, is lack of understanding and a general lack of vocabulary.

In order to analyze this idiosyncrasy, it is critical to examine the media directed at a segment of society that is the most willing to discuss the topic of breastfeeding—that is, the audience of expectant and new mothers reading women's magazines and determining how they will feed their babies, with breast or bottle. This media is critical not just in the article content but in the advertisements as well. The magazine must be taken as a whole, understood in its entire context in order to establish a meaningful portrayal of breastfeeding in this media micro-chasm of society.

This study also considered cultural hegemony in the determination of media content and the possibility that general atmospheric bias in conjunction with media bias could influence a woman's decision to breastfeed or bottle-feed more than her actual feelings. More specifically, this study will look at the different messages among infant feeding products (both breastfeeding and bottlefeeding advertisements). This study also will analyze the general message in the content of the magazine articles, hoping to answer questions about the general nature of the content and why it emerges. And, finally, this study hopes to add to the body of research on the relationship between ad

content and magazine article content by looking at a segment of the parent magazine genre.

In addition to adding to theoretical framework, this study contributes to feminist literature by questioning the portrayal of women in advertisements and to the efficacy of expensive government funded campaigns. When millions are spent on governmental advocacy campaigns such as “Babies were born to breastfeed,” it is critical to analyze how well those tax dollars were used and if the messages were picked up by any media.

The World Health Organization (WHO) and United Nation’s International Children’s Emergency Fund (UNICEF) held a meeting more than two decades ago to address the international marketing of breast-milk substitutes. The World Health Director concluded the meeting with the following statement:

In my opinion, the campaign against bottle-feed advertising is unbelievably more important than the fight against smoking advertisement (Baumslag & Michels, 1995, p. 161).

Extreme negligence and deadly marketing practices of infant formula companies like Nestlé, spawned resistance and regulation like the WHO meeting and inspired many governments and non-profit organizations to promote world-wide social marketing campaigns to promote breastfeeding (Newton, 1999; see also Baumslag & Michels, 1995, p. 165). As a result, the WHO agreed on an International Code of Marketing of Breast-milk Substitutes to prevent further abuses brought to light by the Nestlé scandal. This study takes a snapshot of the environment twenty plus years later.

When it comes to media buys, the U.S. government spent more on paid advertising than Sprint, IBM, Sony, Coca Cola or Nestlé (Smith, 2004, p. 139). Yet, most studies indicate that social health campaigns have little if any effect (Fishbein, et al.,

2002, p. 238). To further complicate the schema, notions of public welfare do not compete well in political and economic areas where implications of the policy may affect primary industry, export earnings, and farmers' interest (Walker, 1990, p. 31). This study serves the public interest by evaluating the general atmosphere where federal dollars are spent in hopes of influencing behavior.

Mothers, teachers, professional communicators, politicians, and the medical profession have been blamed for the abandonment of extended breastfeeding due to ignorance of its real value (Mephram, 1991, p. 34). The information garnished from this research will use content analysis to build on Hausman's (2000) body of work to including the role of corporate advertising in describing "modern conceptions of maternity, the female body, and women's social roles" (p. 272).

This study will complement other research findings by offering empirical evidence about the overall picture that is presented to women concerning breastfeeding. This study also should contribute to feminist political discussions about breastfeeding. It should offer insight for both corporate and social advertising professionals, hopefully inspiring a more accurate and less patriarchal presentation of infant feeding.

Most importantly, this paper should call attention to the infant formula companies' many violations of the International Code of Marketing of Breast-milk Substitutes. All of these issues demand more corporate and political responsibility for the consequences that reduced breastfeeding rates have on society as well as the global economy and environment.

## Research Questions and Hypotheses

**Hypothesis One:** Magazines Will Present Breastfeeding Differently Based on the Level of Infant Formula and Breastfeeding Product Advertising within that Magazine.

**Research Question One:** Do Magazines with a Higher Level of Infant Formula Product Advertising Present Breastfeeding More Negatively in Articles Related to Infant Feeding than Magazines with Less Infant Formula Product Advertising?

**Research Question Two:** Do Magazines with a Higher Level of Breastfeeding Product Advertising Present Breastfeeding More Positively in Articles Related to Infant Feeding than Magazines with Less Breastfeeding Product Advertising?

**Research Question Three:** What are some of the Differences between Infant Formula Product Advertisements and Breastfeeding Product Advertisements?

**Hypothesis Two:** Infant Formula Companies will Violate the International Code of Marketing of Breast-milk Substitutes in their Advertisements.

**Research Question Four:** Do Infant Formula Companies Violate the International Code of Marketing of Breast-milk Substitutes?

These hypotheses and research questions are critical because they look at the entire picture: the ads themselves, the articles themselves, the ads and articles in context of their publications, the publications in context of their financial ties, and the overall advertising image in relation to the International Code of Marketing of Breast-milk Substitutes.

I expect to find that magazines will cater to their advertisers. Magazines with a high level of infant formula product advertising will present breastfeeding negatively within article content. Conversely, I expect that magazines with high levels of breastfeeding product advertising will present breastfeeding more positively within article content. I expect that there will be differences between infant formula ads and breastfeeding ads. A theme guiding this study relates to the female role within the infant feeding product advertisement, specifically that infant formula advertisements will

present females quite differently than breastfeeding advertisements. In addition, I expect infant formula advertising will violate many articles of the International Code of Marketing of Breast-milk Substitutes.

## **REVIEW OF LITERATURE**

The review of literature will analyze critical components in understanding the current environment in which breastfeeding exists today. In addition to this, it is also necessary to outline the role advertising has played in the historical development and modern success of the infant formula industry. Understood in its historical context, the socio-cultural environment will offer a much deeper understanding of the methodology used in this study.

### **The Socio-cultural Environment of the Real World**

When analyzing media messages within their own context, it is necessary first to place those messages within the large picture of society. In other words, one must compare the proposed world advertisers present to consumers with the real world in which consumers actually live. Breastfeeding rates, attitudinal and belief surveys, and common stereotypes garnered from the body of breastfeeding literature will serve as guiding points in understanding the real world environment.

**Breastfeeding Rates.** Seventy percent of college graduates breastfeed whereas only 15 percent of women with no high school education breastfeed (Baumslag and Michels, 1995, p. xxv). U.S. minority breastfeeding rates are well below national goals and international averages for developed countries (see Table 1).

Ross Products, a unit of Abbott Laboratories and maker of the infant formula known as Similac, tracked breastfeeding trends since 1954 with an annual mail survey of more than 100,000 new mothers (Abbott, 2003; Haider, 2003). The Ross Mothers Survey indicated that although breastfeeding rates are higher than they've been in decades,

**Table 1. Percentages of U.S. Breastfeeding Rates (2001) Compared with the DHH Healthy People 2010 Initiative Goal**

	<b>Initiated in Hospital</b>	<b>After 6 Months</b>	<b>1 Year</b>
<b>Low-income</b>	58.0	21.0	-
<b>African American</b>	53.0	22.0	-
<b>National Average</b>	69.5	32.5	-
<b>2010 Goal</b>	75.0	50.0	25.0

Note: Dash indicates data not obtained for that category. (Information obtained and summarized from July/August 2003 Issue of *Annals of Family Medicine* referenced in Abbot Laboratories, 2003).

breastfeeding rates are still lagging for working mothers and participants in the special supplemental nutrition program for Women, Infants and Children (WIC) (Abbott, 2003).

In Louisiana, the rates are even lower. According to data collected by the Centers for Disease Control and Prevention (CDC), 46 percent of Louisiana moms never breastfed while 17 percent are still breastfeeding at six months and six percent at one year (AP, 2004). The United States has the lowest continued breastfeeding rates in the developed world:

Despite the well-established body of medical evidence that breast milk provides the most complete form of infant nutrition and maternal health benefits, U.S. breastfeeding rates fall short of national goals—especially in the low-income and minority populations (Women’s Health Weekly, 2003).

La Leche League International has made significant strides in promoting worldwide breastfeeding; however, its membership base consists mainly of white, older,



middle-class, mothers with a college education who do not work outside the home—the demographic group most likely to breastfeed anyway (Hausman, 2000, pp. 285, 281). These upper-class women comprise the same demographic group that was thought to be too civilized to lactate at the beginning of this century; now they are the most likely demographic group to do so (Mephram, 1991, p. 34).

These historical breastfeeding trends combined with the statement by The World Health Organization (WHO) that “Less than 5% of women in the world are physically incapable of breastfeeding” illustrate that breastfeeding is not a physiological (in)capability but rather a cultural dilemma (Mephram, 1991, p. 32). Deep-bedded and long-standing cultural beliefs are integral to breastfeeding dialogue. Ajzen & Fishbein’s (1980) theory of reasoned action explains how social atmosphere influences behavior: the combination of attitudinal beliefs about a given behavior with perceptions of the expectations of others in the social milieu can predict intention to carry out a given behavior (Slater, 1999, pp. 335 – 336).

This theory has been used in many health campaigns, of which the anti-smoking and AIDS prevention campaigns provide good examples of struggles with corporate advertising power and difficulty in influencing health-related behavior. In the anti-smoking example, exposure to counter-industry campaigns led to negative beliefs and attitudes about the tobacco industry and its practices, reducing the likelihood of smoking (Hersey, et al., 2003, p. 545). In a similar study conducted by Middlestadt, et al. (1995) on AIDS awareness and condom use, if an individual talked about condom use and believed that his/her friends used condoms, then that individual was more likely to have

used condoms (Fishbein, et al., 1993; Fishbein et al., 1995; referenced in Middlestadt et al., 1995, p. 22).

Comparable to the examples of smoking and condom use, the decision to breastfeed, according to the theory of reasoned action, is the function of attitudes toward the act of breastfeeding in addition to the underlying beliefs surrounding breastfeeding in society. And, building on prior studies such as the anti-tobacco and AIDS awareness campaign research, a person may be more or less likely to breastfeed depending on perceived normative pressure, either from friends or from a ubiquitous media source.

“Friends” and “ubiquitous media source” would be difficult variables to analyze quantitatively; so, in this study, perceived normative pressure will be analyzed using breastfeeding rates combined with findings from a content analysis of a segment of the prenatal magazine genre. Describing atmospheric bias by using breastfeeding statistics is straightforward. Describing media bias calls for a more elaborate review of literature, especially that which considers beliefs and stereotypes associated with breastfeeding conducted by prior studies and various researchers.

**Beliefs and Stereotypes about Breastfeeding.** Women are highly influenced in their initial choice to breastfeed by the “perception that breastfeeding in public is not acceptable,” that it is “inappropriate” or even “nasty” (McIntyre et al., 1999a; referenced in Bartlett, 2000, p. 116; Guttman and Zimmerman, 1997, p. 29; referenced in Nadesan & Sotirin, 1998, p. 224). The belief that breastfeeding in public is inappropriate recalls negative Victorian notions of patriarchy’s claim to the city by separating the spheres into public/male versus private/female (Bartlett, 2000, pp. 114 – 115).

Scott et al. (1997) conducted a focus group study on attitudes about breastfeeding in public as a political act and found that male university students believed that “breastfeeding in public is explicitly associated ‘with left-wing radicals, greenies, and feminists’” (p. 246; quoted in Bartlett, 2000, p. 115). Such surveys exemplify Mephram’s (1991) argument that “...The principal reason for the decline in breastfeeding is a widespread lack of appreciation of its real nature and importance in human development” (p.28).

For decades, health organizations have tried to increase physical activity in our country, finding that a major barrier to changing the public’s lifestyle is the perception that physical activity should be “a structured regimen of vigorous activity that must be performed at least three or more times per week” (Renger, Steinfeld, & Lazarus, 2002, p. 19). Healthy lifestyle barriers such as perceptions of difficulty, the need for medical intervention, and regimented structure along with a lack of social support and knowledge also are cited as common barriers to breastfeeding, illustrated best by a respondent’s comment that a breastfeeding mother is someone who “has a lot of time on her hands” (Hausman, 2000, p. 282; Guttman and Zimmerman, 1996, p. 26; quoted in Nadesan & Sotirin, 1998, p. 224).

While most objections to breastfeeding usually center on difficulty, offensiveness, distastefulness, and unpleasantness, pro-breastfeeding narratives center on God-given rights, naturalism, and medical benefits (Reading, 1998; referenced in Bartlett, 2000, p. 116). The belief structure in relation to breastfeeding is somewhat contradictory. Gregg (1989) found that while 75 percent of respondents thought breastfeeding was healthier than infant formula bottlefeeding, 58 percent admitted that they were

embarrassed by public breastfeeding and thought of pin-up girls while only 2 percent supported breastfeeding in public (referenced in Mephram, 1991, p. 33).

The issue then, is not that the public is unaware of breastfeeding's health benefits. Beliefs about the social consequences of breastfeeding are the issues that must be analyzed in order to explain why women do or do not breastfeed. Leiss, Kline and Jhally (1986) described how advertising involves serious concerns about family, happiness, sex roles, stereotyping, affluence, cultural traditions, and the role of business in society (p. 3; referenced in Lill, Gross, & Peterson, 1986, p. 36). In this sense, advertising goes beyond product pushing, to become a vehicle for commodity narratives, telling stories about self-identity:

...the desire for self-identity, whether it is the desire to be a good mom or the desire for flawless golden hair or the desire for respect, etc. For most women, interpreting these narratives depends on a taken-for-granted familiarity with the codes of patriarchy....(Williamson, 1978; Goldman & Wilson, 1983; referenced in Goldman, Heath, & Smith, 2001, pp. 333–334).

Thus, women decide to either breastfeed or bottle-feed based on their personal alignment with the symbolic identity attached to either method.

History indicates that civilized women have consistently lost “their capacity to lactate” (Mephram, 1991, p. 29). Others studies show that women opt for bottles because “...breastfeeding makes them feel like ‘cows’ or they “...feel discomfort or disgust in comparing themselves to the great apes” (Hausman, 2000, p. 276). Some breastfeeding literature uses this evolutionary narrative, describing how women's bodies are the same as their 400,000 year-old ancestors or focusing on “a return to nature” (Hausman, 2000, p. 275 – 276). This biological role portrayal of breastfeeding also alienates audiences because such terminology reduces “...breastfeeding to an involuntary function of the

body, the physiological completion of the reproductive cycle that is, nevertheless, culturally embedded” (Hausman, 2000, p. 282). By employing a traditional, evolutionary, or biological approach, women tend to reject non-modern or “inherent primitivism” notions along with suggestions that their bodies are stagnant, “lagging behind men on the evolutionary ladder” (Hausman, 2000, p. 275 – 276).

By freeing women of prehistoric and biologic mothering roles, the use of infant formula and the rejection of breastfeeding are seen as emancipators while the conservative profession of medicine promotes breastfeeding as the proper mode of the “female biologic role” (Hausman, 2000, p. 285). Even pediatrician’s growth charts measure babies’ health “based on formula-fed growth curves” (Cordes, 1996; referenced in Nadesan & Sotirin, 1998, p. 225).

This further supports the notion that breastfeeding was something in need of medical monitoring, to be viewed as “...suspect, under the belief that many women were unable or unwilling to nurse their children effectively because of insufficient milk, fatigue, or lack of motivation” (Apple, 1987; referenced in Nadesan & Sotirin, 1998, p. 225). Attempting to make a science of breastfeeding “...denigrates women’s experiential and traditional know-how and casts breastfeeding difficulties as ‘normal,’ offering a de-naturalized repertoire of techniques and substitutions to correct the errancies of ‘natural’ breast-feeding” (Nadesan & Sotirin, 1998, p. 226).

While many women view lactation as empowering—something that only a woman can do—others view it as enslaving. Breastfeeding is more than just a choice in the method of infant feeding; it is a “socio-cultural dilemma,” either reviving or rejecting traditional patriarchal demands of feminine modesty, women’s place in society, and other

gender-defining antiquities (Nadesan & Sotirin, 1998, p. 218). It is a contrast between “maternal devotion” and “female sexuality, immorality, and debased bodily functions” (Nadesan & Sotirin, 1998, p. 218). The debate concerning breastfeeding is reduced to the contested status of female sexuality; breastfeeding itself becomes a nodal point further “...articulating the contradictions of the maternal in Western patriarchal capitalism” (Bartlett, 2000, p. 117; Nadesan & Sotirin, 1998, p. 228).

The themes of these contradictions have arisen numerous times in gender discussions. For instance, the act of breastfeeding itself is a contradiction, deemed both “natural” and unnatural, “a subject of science and medicine,” requiring expert advice and constant monitoring yet something that is to be performed in seclusion (Nadesan & Sotirin, 1998, p. 217).

Women were allowed to use public space as long as they were “discreet;” similarly, breastfeeding in public was deemed acceptable only if it adhered to the traditional role of modesty imposed on females (Bartlett, 2000, p. 117). The moral, nurturing mother was exemplified in art, the image of Rafael’s Madonna. But, the commercialization of wet nursing by wealthy, aristocratic families, recast breastfeeding as something indiscreet, sinful and perverted by the “...lower-class mother who rented out her breasts as a wet-nurse....transforming a sign of natural, self-less, maternal devotion into a public display of economic exchange” (Nadesan & Sotirin, 1998, p. 219; see also Fildes, 1986; Golden, 1996).

While prior literature focused on traditionally female careers, like wet nursing, for example, other studies of advertising illustrated how women were shown in nonworking roles while men were shown more professionally (Weinberger, Petroschius, & Westin,

1979; Referenced in Lill, Gross, & Peterson, 1986, p. 36). In a time when women are still attempting to secure equality in the workforce, breastfeeding is challenging:

Breastfeeding presents modern women with a profound philosophical and practical dilemma, since more than any other biological function of the female body, breastfeeding creates obstacles to women's equal participation in the work force and in civic culture (Hausman, 2000, p. 272).

The infrastructure of the American social system is a long way from supporting breastfeeding. There have been arrests, charges of indecent exposure, and accounts of women being fired for breastfeeding or expressing milk during working hours. There is a shortage of acceptable nursing rooms in public space. Some groups have attempted to place these issues in the forefront by hosting "Milk-ins" or role-reversal guilt appeals. For instance, a group in Australia used a man in a suit nursing a baby to stress the difficulty of breastfeeding at work.

Other themes link breastfeeding with debased bodily functions like the female menstrual cycle or using the restroom:

Morse documents the defilement of breastfeeding as an 'excretory function' with an image from a 1983 book on breastfeeding strategies. In it, a mother in a uniform is sitting on a toilet while expressing her breasts. Morse comments, "We are teaching mothers to prepare their infant food in the room reserved for evacuating bodily wastes" (Morse, 1989, p. 227; referenced in Nadesan & Sotirin, 1998, p. 222).

Thematically, the act of breastfeeding is viewed in a contradictory manner, something that society and culture play a tug of war with approval and disgust. Breastfeeding as a health issue is even more incongruous. Most agree that "breast is best;" however, the contradictory messages women receive from images, articles, and advertising in doctors' offices, hospitals, and popular magazines imply that breastfeeding is unnecessary and difficult if not impossible to achieve (Hausman, 2000, p. 273).

Social anxieties, lack of self confidence, and fear of physical inadequacy are compounded by rumors of “insufficient milk” or babies that “refuse to suckle” (Mephram, 1991, p.28; see also Chetley, 1986; Van Esterik, 1989). Many advertisements or direct-to-consumer publications use classic fear appeals, making women worry that their diets are too inferior to breastfeed or that their eating habits are unworthy of their infants. Such publications including lavish recipes to remind new mothers of their poor eating habits; or they use words such as “try,” “attempt,” to signify that mothers commonly fail at breastfeeding (AP, 2004). As a result, instead of rejecting breastfeeding, these feminists believe that no one has a right to interfere with women who wish to breastfeed their babies, particularly by denigrating their self-confidence in the process (Walker, 1990, p. 33).

Rima Apple (1987) demonstrated how American mothers’ reliance on scientific expertise to guide infant care coincided with the development and widespread use of infant formulas as breast-milk substitutes (Hausman, 2000, p. 286). Hausman (2000) outlined problems with medicine’s authority over infant feeding citing how “experts” prescribe information about motherhood that used to be available from the family:

If “scientific data” is held up over “anecdote”...it is because the physician can only be the champion of the former (Apple, 1987; Grant, 1998; referenced in Hausman, 2000, pp. 285, 277).

While mothers exceedingly rely on the medical profession for expert advice on infant feeding, critics have found that medical courses and textbooks ignore the importance and scientific principles of breastfeeding (Mephram, 1991, p. 33; See also Mills, 1990). Ruth Lawrence authored one of few course books about breastfeeding tailored to physicians. However, physicians themselves have been cited as “...some of



the worst perpetrators of misinformation about infant feeding through their collaboration with infant food manufacturers” (Hausman, 2000, p. 284; See also Apple, 1987; Baumslag & Michels, 1995; Palmer, 1993).

**Cultural Hegemony.** Donaldson’s (1982) social contract theory of business cautioned that corporations could use financial power to influence public policy (Cunningham, 1999, pp. 83, 91). As early as the 1930s, “many members of the medical profession had entered into an unwritten pact with babyfood manufacturers” creating “strong industry-medical links, of mutual economic advantage” (Mephram, 1991, p. 29; See also Apple, 1987). Science is not immune from the pressures of political and commercial pressures (Mephram, 1991, p. 28; See also Ravetz, 1990).

For instance, infant formula makers fund research and are large financial donors for conferences of the American Academy of Pediatrics (AAP); Ross (owner of Similac) donated more than \$500,000 to the AAP in 2001 (Petersen, 2003). In addition to this, Ross purchased 300,000 copies of the AAP’s breastfeeding book allowing the academy to make more than \$500,000 in profits from book sales with another 300,000 copies on order for in 2004 (Petersen, 2003). As mentioned earlier, the AAP was an outspoken critic of the first approach taken by the “Babies were born to breastfeed” campaign (the approach that warned mothers of the dangers of formula-feeding). The AAP is also the organization that bases infant development charts used by many pediatricians on formula-fed growth curves with no curve for breast-fed growth rates.

Davies, Dickey, & Stratford (1987) offered insight into the complex nature of camouflaging media bias:

Material which is favourable to the establishment must be disseminated;  
that which is not must either be neglected or rendered “safe” in some way.

We do not live in a totalitarian society; there is no “official” censorship or manipulation of news. But, the ownership, structure and employment patterns of the media ensure that they operate as a major force for the ruling class, as agents of patriarchal capitalism (p. 50).

Rogers (1986) observed that the public generally accepts preconceived ideas through exposure to repetitive advertising and the omnipresence of mass media (p.95). If the public is constantly shown bottles instead of breasts, exposed to synthetic boobies rather than nipples, then, according to Rogers, beliefs about bottlefeeding will superimpose any beliefs about breastfeeding. Selections from Antonio Gramsci’s *The Prison Notebooks* add a powerful perspective to this notion:

...Every state is ethical in as much as one of its most important functions is to raise the great mass of the population to a particular cultural and moral level...which corresponds...to the interests of the ruling classes (Lawrence and Wishart, 1971, p. 258, referenced in Bennett, Mercer, & Woollacott, 1986, p. 22).

Potter furthered this argument by describing advertising’s strong influence over the values of our society by enforcing preexisting attitudes, exalting materialism and consumption, and diminishing the range and variety of choices (1954, p. 188). Valdivia (1995) described this phenomenon: “....the world depicted in advertisements comes to be thought of as the only possible world” (p. 185). Louisiana leaders blame the state’s low breastfeeding rates on stereotypes that breastfeeding is primitive along with advice from generations of women who perceive bottlefeeding as the norm, where “the idea of feeding their children in any other way did not arise” (AP, 2004; Palmer, 1999, p. 149).

Breastfeeding rates, beliefs and stereotypes associated with breastfeeding, and repetitive themes in advertisements all contribute to the meaning of media bias and its relation to cultural hegemony. But, in order to understand the influence of infant formula

advertising on breastfeeding, Davies, Dickey, and Stratford's conclusions should be viewed in context of advertising's role in the historical rise of the infant formula industry.

### **The Role of Advertising in the Rise of the Infant Formula Industry**

Potter (1954) was prophetic when he wrote that "Advertising should be recognized as an important social influence and as our newest major institution—an institution peculiarly identified with one of the most pervasive forces in American life, the force of economic abundance" (p. 188). Potter illustrated how advertising was the answer to the abundance created by a consumption-based society (pp. 172–173). The solution to dairy abundance was the \$8 billion per year infant formula industry.

Justus von Liebig began the trend of breast-milk substitutes in Germany as far back as 1867; János Horlick and Henri Nestlé pioneered the way in Europe and North America (Mephram, 1991, pp.28-29). Initially, infant formulas were expensive, custom-tailored formulas made by private physicians. This was a service that most middle-class parents could not afford, leaving an enormous market untapped. With economic abundance, technological advancements, mass production, and more efficient systems of distribution, the infant formula industry skyrocketed:

The mechanization of the dairy industries resulted in large surpluses of whey from the cheese industry, which in turn led to a major expansion of the baby milk industry during the late nineteenth and early twentieth centuries. Dried milk powder...added to the availability of inexpensive and transportable milk. Buckets of skimmed milk were abundant as butter factories sought a profitable market for its waste (Baumslag & Michels, 1995, p.129; see also Palmer, 1999, p. 21).

Waste and surplus from the dairy industry found a profitable outlet, consistently using cow's milk as the most popular breast-milk substitute regardless of the centuries of experience indicating that "asses' and goats' milks are known to be closer in composition

to human breast-milk than cow's milk" (Baumslag & Michels, 1995, p. 70). Coconut oil, cottonseed oil, and beef tallow also are used in infant formula to replace cow's milk fat along with excess cheese whey which helps the protein in cow's milk to be more digestible (Baumslag & Michels, 1995, p.131). Soy bean-based formula is prescribed for babies with extra sensitive tummies—not because infant formula companies analyzed the most nutritional ingredients for babies, but because a “vast and profitable soy bean industry aggressively sought out new outlets for its products” (Baumslag & Michels, 1995, p. 131).

Potter was the first to coin advertising as the “Institution of Abundance,” contending that advertising “is a form of citizen education to instill new needs, to train people to act as consumers, to alter values, and to speed market adjustment to abundance” (p. 175). Advertising, in this sense, is much more than a “product pusher” because of its ability not only to “produce products but also the want for those products” (Grove & Kilbourne, 1994, p. 24; referenced in Cunningham, 2003, p. 230). Radford (1991) added to this discussion with the following statement:

The idea that breast milk should be replaced by an artificial substitute has been compared to suggesting that dialysis machines should replace human kidneys. Both dialysis machines and artificial baby milks have a role to play and can save lives, but to use them in place of the natural originals provided by the human body is a waste of resources (Radford, 1991; see also Baumslag & Michels, 1995, p. 130).

By educating the consumer about social norms and altering values, advertising occupies a critical role in modern culture as an “instrument of meaning transfer,” comparable in its social influence to the school and church (Potter, 1954, p. 167; Bell 1960; Leiss, Kline and Jhally, 1986; Pollay, 1986; McCracken, 1986; Sherry, 1987; referenced in Grove & Kilbourne, 1994, p. 24):

Certainly it marks a profound social change that this new institution for shaping human standards should be directed, not as are the school and the church, to the inculcation of beliefs or attitudes that are held to be of social value, but rather to the stimulation or even the exploitation of materialistic drives and emulative anxieties and then to the validation, the sanctioning, and the standardization of these drives and anxieties as accepted criteria of social value (1954, p. 188).

Potter's description of "anxieties" becomes standardized when "insufficient milk" becomes a common diagnosis for the abandoning of breastfeeding or avoidance of it all together, especially given the recurring fact that "Less than 5% of women in the world are physically incapable of breast-feeding" (Mephram, 1991, p. 32). This modern invention of deficiency continues to refer millions of customers to infant formula both by advertising in hospitals and the medical profession's lack of knowledge on the topic of breastfeeding itself (Mephram, 1991, p. 33; Nadesan & Sotirin, 1998, p. 226; Hausman, 2000).

Once a mother terminates breastfeeding, it is extremely difficult to reverse that decision (WHO, 1981, p. 16). Infant formula advertising, then, has successfully transformed a want not only into a need but to a vital necessity—guaranteeing one more permanent consumer to the industry.

### **Breastfeeding and Bottlefeeding Advertising Research**

Potter's "exploitation of materialistic drives" is integral to the discussion regarding advertising executives' successful promotion of infant formula as "new, modern, and exciting" or as "lifestyle alternatives" in which modern science allowed women to be relieved of Mother Nature's burdens and provided mothers with more freedom and convenience than had ever been possible (Baumslag & Michels, 1995, pp. xxv, 130). In doing so, infant formula advertisers capitalized on the infatuation with


technology, Western modernization, and consumerism leading to the assumption that scientists in high-tech laboratories outdid Mother Nature.

Kotler and Zaltman (1971) found it perplexing that there is a marketing problem for free medical care (p. 9). As documented earlier, breast milk is not only scientifically-proven healthier than infant formula but it also is free. Other authors indicate that the problem is not that simple, indicating consumers would make the right decision if given the whole picture:


Given a choice of two brands of food in a supermarket, few would buy the one known to be three times as likely to cause diarrhea. If consuming it was also more likely to lead to cancer, diabetes, respiratory infections, dental caries, etc, it would be startling to find it in a supermarket at all. And if the other “brand” (breastfeeding) was much cheaper, gave the mother some protection from several unpleasant diseases, provided free contraception for six months or more, and was highly pleasurable to use – what reasons, short of medical disability, could there be for not preferring it? (Mephram, 1991, p. 31-32).

Studies utilizing copy tests have shown that comparative advertising can lead to the formation of false beliefs (either intentionally or unintentionally) that the advertised brand is superior to *all* other brands (Barone, Rose, Miniard, & Manning, 1999, p. 47). Breast-milk will be considered within this group of “other brands,” given the historical tensions and comparisons between these two groups. This is also an important variable because: “Constant comparison of formula to breastmilk has succeeded in reducing breastfeeding to the one-dimensional level of breastmilk substitutes” (Baumslag and Michels, 1995, xxiii). (For an illustration of advertising that compares infant formula to breast-milk, see the Similac ad pictured in Figure 3.)

Even when infant formula ads give “lip service” to breastfeeding, they are only painting the idea of a responsible campaign because the bulk of their advertisements still



Is she developing the mind of a scientist?  
Or the eye of an artist?



Only Similac® Advance® has published long-term clinical research showing brain development like breast milk.<sup>†</sup>

*As part of an excellent nutritional foundation for your baby, Similac Advance provides a unique blend of DHA and ARA. These nutrients are found naturally in breast milk and are important for both mental and visual development. Breastfeeding is recommended, but if you choose to use formula, you can choose Similac Advance with confidence. Ask your doctor:*

Reasons to Choose Similac Advance	Similac® Advance® with Iron
Brain (mental) development like breast milk.	Yes
Visual development like breast milk.	Yes
Greater calcium absorption and greater bone density* than Enfamil LIPIL to help build strong bones.	Yes
Has DHA and ARA at levels found in breast milk. **	Yes

acAdvance.com

**Figure 3. Infant Formula Advertising and Comparison to Breast-milk.** Advertisement for Similac (infant formula product) found in *Parenting* magazine, February 2004 issue, inside cover.



concentrated on bottlefeeding (Geach, 1973, n.p.). Companies like Similac imply a similarity to breast-milk even in their brand names (Simi = Similar to; Lac = lactation). Apple (1987) and Palmer (1988) both indicated how “scientific motherhood” has evolved as formula ads position themselves similar to breast-milk, some even promoting “formula as more scientifically adapted for babies than breast-milk” (Nadesan & Sotirin, 1998, p. 224). However, lactation is something unique to women; and other groups argue that this type of comparison devalues the very nature women’s sexuality (Walker, 1990, p. 33).

Corporations often use the lure of modernization as a marketing tool to sell new products. Although it is an erroneous assumption, modernization is almost always linked with Westernization (Rogers, 1969, pp. 14, 99; Muller, 1974). It is popular thought in the marketing and advertising industries that “...the term ‘modern’ is often equated with ‘Western’ and the assumption is that with modernity people also will adopt Western values,” thus, fusing culture with consumption (Mooij, 2004, p. 53; See also Jhally, 1998; referenced in Cunningham, 2003, p. 229). Advertisers have taken this approach and applied it to infant feeding, creating the notion that bottlefeeding is mainstream and intelligent:

In many parts of the world, breastfeeding rates have plummeted as women have become more ‘educated’ and affluent. Here in the West, the opposite phenomenon can be seen: the more educated and affluent the woman, the more breastfeeding is a priority (Baumslag & Michels, 1995, p. xxv).

These findings correspond with many anxieties that place breastfeeding mothers in private while allowing the formula-feeding mothers to participate in public life. Breastfeeding’s depiction as “nasty” or as a “quasi-sexual” act is another concern for new mothers and a negative stereotype that has been found in both formula and breastfeeding product ads (Dettwyler, 1995; referenced in Nadesan & Sotirin, 1998, p. 223). For



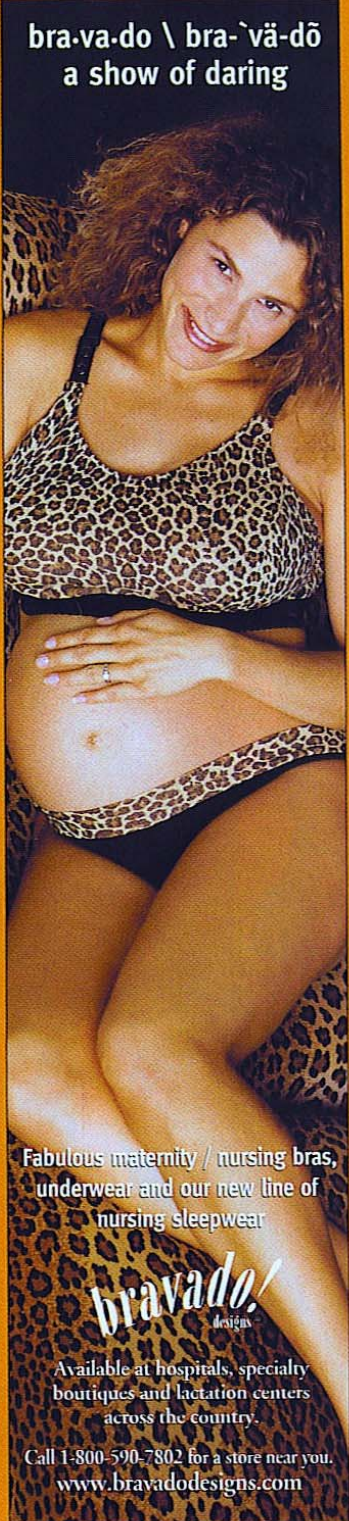
instance, one ad used a lace negligee-clad, exotic-looking Asian woman reclined on an embroidered sheet to sell nursing pads (Nadesan & Sotirin, 1998, p. 223). A more recent example of the quasi-sexual suggestion in breastfeeding product ads involves an ethnic model in a suggestive poses wearing exotic lingerie (see Figure 4).

Infant formula advertisers have capitalized on female empowerment as a vehicle to sell their product while inherently reinforcing breastfeeding's association with traditional and biological female roles. These traditional roles keep women in the bedroom and men in the office.

However, since the early 1970s, advertisers have acknowledged women consumers' rejection of these roles and began to connect corporate products to women's emancipation (Goldman, Heath, & Smith, 1991, p. 335). For instance, the 1968 Virginia Slims cigarette television and print ad campaign was nostalgically photographed in sepia tone, featuring fictional events from the 1920s women's suffrage movement, all to the catchy phrase, "You've come a long way." The campaign successfully attracted new female smokers, "who may have considered that responding to the campaign was a way of declaring some kind of symbolic allegiance to issues in the women's movement" (Sloane, 1971; referenced in Bradley, 2003, p. 211; see also Gallagher, 1981, p. 76).

Capitalizing on this trend, Gerber Products Company and Bristol-Myers began marketing infant formula directly to consumers in 1985—a year when the pharmaceutical industry broke away from its traditional push or physician-aimed advertising and changed to a pull strategy focused on direct-to-consumer (DTC) advertising (Parker & Pettijohn, 2003, p. 280). This pull strategy cost pharmaceutical companies a \$2.6 billion direct-to-consumer advertising bill in 2000 and was projected soon to surpass the plump

bra·va·do \ bra-`vä-dō  
a show of daring



Fabulous maternity / nursing bras,  
underwear and our new line of  
nursing sleepwear

**bravado!**  
designs

Available at hospitals, specialty  
boutiques and lactation centers  
across the country.

Call 1-800-590-7802 for a store near you.  
[www.bravadodesigns.com](http://www.bravadodesigns.com)

**Figure 4. Quasi-sexual Breastfeeding Stereotypes.** Advertisement for Bravado designs found in *ePregnancy* magazine, February 2004 issue, page 39.

advertising budgets of technology, fast foods, and soft-drinks (McLean, 2001; Handlin et al., 2003; Pinto, 2000; referenced in Parker & Pettijohn, 2003, pp. 279, 280).

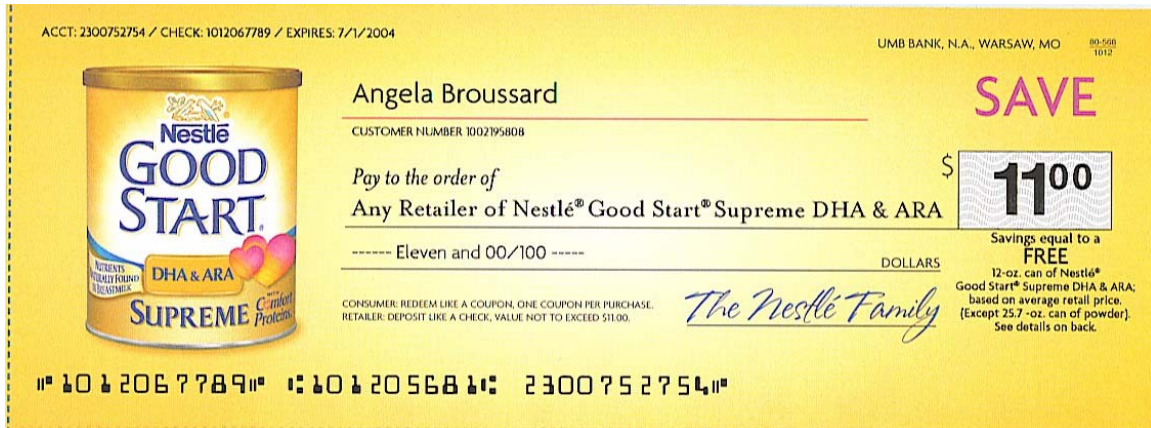
A common complaint against corporate advertising is that they not only produce products but also the want for those products (Galbraith, 1998; referenced in Cunningham, 2003, p. 230). Pharmaceutical companies typically spend upwards of \$7 billion on giving physicians free samples and promotional gifts because it has demonstrated to be the most successful avenues to brand loyalty and separation from the competition (Strout, 2001; Daly, 1993; referenced in Parker & Pettijohn, 2003, p. 284).

The Parker & Pettijohn (2003) study found that direct-to-consumer advertising increased request rates of brand choices and the likelihood that physicians would prescribe those brands (p. 285). Once a brand is preferred, individuals usually become biased in message analysis and support continued use of the preferred brands (Calder, 1981; referenced in Tellis, 1988, p. 135). Infant formula promoters claim that “their only aim is to affect brand loyalty” and not to increase the total market (Walker, 1990, p. 34). Yet, with the increase in companies using hospital discharge packets, containing free infant formula samples and coupons, exclusive breastfeeding rates were reduced significantly (U.S. preventive services task force recommendations released, 2003; Women’s Health Weekly, 2003).

By discarding traditional forms of advertising, infant formula companies could market their products directly to the doorsteps of pregnant women. These new campaigns are tailored month-by-month throughout the pregnancy and the infant’s first year of life. They come inconspicuously in the form of advice booklets, recipes, baby calendars, photo frames, valuable coupons, and, free samples of infant formula—regardless of the

fact that this is a complete violation of the International Code of Marketing of Breast-milk Substitutes (see Figure 5). Hospitals also provide alternative advertising venues by awarding infant formula companies access to a captive, sleep-deprived, emotionally-charged, and usually medicated audience of birthing mothers.

A more detailed description of breastfeeding-related advertising research also will be included in the next section as these themes directly relate to variables selected for use in the content analysis. These illustrative examples provide insight into the formulation of the materials and methods used in this study.



**Figure 5. Direct to Consumer Marketing.** Example of direct to consumer marketing. This coupon was sent directly to author's door along with a free sample of infant formula.

## MATERIALS AND METHODS

This study is and quantitative based on findings from a content analysis. A small segment of the study is qualitative in nature, in that examples of current trends in advertising are illustrated and used as examples of the variables derived from past research conducted on beliefs and stereotypes associated with breastfeeding as well as literature concerning prior breastfeeding representation in advertising.

Because it is a “study of the message itself and not of the communicator or audience,” the author selected content analysis to discover themes in magazine advertisements and articles (Kassarjian, 1977; referenced in Lill, Gross, & Peterson, 1986, p. 36). It audits the “communication content against objectives” (Weber, 1990, p. 9; referenced in Kline & Mattson, 2000, p. 7). More specifically, Holsti’s (1969) thematic content analysis utilized “detailed and sophisticated comparisons of texts” (Weber, 1990, p. 22; referenced in Abraham, et al., 2002, p. 230).

In order to distill a general view of the themes entangling infant feeding, the thematic unit will illustrate recurring threads of meaning or “clusters of words with different meanings or connotations that taken together refer to some theme or issue” (Weber, 1990; Baxter 1991; referenced in Kline & Mattson, 2000, p. 8). Key variables will be analyzed in the content analysis organized into violations of the International Code of Marketing of Breast-milk Substitutes, underlying beliefs variables and socio-cultural stereotype-related variables obtained in the literature review.

### **Sample**

Three prenatal or family genre publications were used in the analysis: *American Baby*, *ePregnancy*, and *Parenting*. There were 12 issues for each magazine in the

calendar year 2004, totaling 36 magazines for the selected period (this included end/beginning of the year issues that combined January/February or December/January).

The main unit of analysis was the magazine advertisement, either infant formula product or breastfeeding product. The secondary unit of analysis was the magazine article, specifically referring to articles related to breastfeeding. A total of 128 infant formula advertisements, 122 breastfeeding product advertisements, and 57 articles were analyzed in the study.

Magazines were selected based on Bitterman and Wolford's (1990) study on health campaign promotion, which showed women preferred magazines as the medium for health information and were influenced by magazines more than men (Abstract; Pfeffer, 2004; see also Bitterman & Symons, 1990). Magazines also were considered a more personalized media than other formats (Bitterman & Wolford, 1990). Female readers were found to enjoy magazine advertising, indicating it was "an appealing visual element to the publication;" they welcomed the product information regardless if it was packaged as advertising or editorial content (Cunningham, 2003, p. 186; Cunningham & Haley, 2000). Magazines were selected for the charge that "...Gradually the multitude of exaggerations and biases builds up to become an aggressive pressure on women to conform" (Davies, Dickey, & Stratford, 1987, p. 41-42).

Because infant formula advertisements occupy a significant percentage of space in prenatal and family magazines, it is essential to analyze these ads in their original context with articles related to the subject of breastfeeding. Researchers have determined that magazines have a "reputation of catering to their advertisers' demands" (Cunningham & Haley, 2000; Howland, 1989; Hoyt, 1990; Lasek & Martin, 1990;

Orenstein, 1990; Potenzano, 1990; Steinem, 1990; Waldman, 1991; referenced in Cunningham, 2003, p. 176).

Instead of segregating magazines over a long time period, each month for each magazine was reviewed for a time period of one calendar year to mimic the typical time frame involved in the reproductive cycle including preconception, conception, gestation, childbirth and up to the six week time period that most mothers return to work. The six-week postpartum date also represented the time frame when the majority of women begin to supplement, begin the process of weaning, or quit nursing altogether. Analyzing every issue of the calendar year also counteracted the “seasonal effect of advertising in magazines” (Cui, 2000, p. 284).

Young (1990) provided essential information on women’s magazines, especially the *Parents* magazine, the genre that catered to mothers with child-rearing advice (Young, 1990, p. 17). Scholars of well-known universities that are heavily immersed in early childhood development scientific research have contributed articles and consulted with *Parents’* staff writers both historically and presently (Young, 1990, p. 19). Studies found that *Parents* exhibited significant changes in its portrayal of breastfeeding reflecting social and cultural views of the times (Young, 1990, pp. 20, 23). Because of standing research on *Parents* magazine, this study used newer challengers to the established giant such as the popular magazines *Parenting*, *American Baby*, and *ePregnancy*.

*American Baby* published by Primedia boasted a 23.7 percent share of the mothers with children less than one year of age market and a 2 million controlled circulation (Schlossman, 1985; referenced in Young, 1990, p. 19; see also Granatstein,



2002, p. 41). Other publications challenged the 75-year old category giant *Parents* in more areas than circulation. In 2003, *Parenting* published by The Parenting Group owned by Time, Inc., “set ad page and ad dollar records” (Brady, 2003, p. 40; Granatstein, 2002, p. 41). After Time Inc., bought First Moments, a company that issues sample baskets to new parents in hospitals, the Parenting Group marketed subscription offers to 3.9 million new mothers annually (Kerwin, 1998, p. 6). In 1997, however, Kerwin found that *American Baby* became the category leader for the pre-natal and first-year market, boasting a rate base of 1.65 million (p. 28).

The market was tight in terms of circulation and ad revenue illustrated by the following statistics through June of 2002: *Parents*’ 2.2 million-circulation with 648 ad pages through June of 2002 and *Parenting* 2.15 million circulation with 502 pages. Also, *American Baby* (Primedia owner of Better Homes and Gardens) had 3312 ad pages with a 2 million controlled circulation (Granatstein, 2002, p. 41). Because the market was so close, the author hoped to add to the body of literature already written about *Parents* with newer and equally as popular magazines. *ePregnancy*, although it declared itself a paid subscription magazine, never was ordered yet appeared on the author’s doorsteps. Other new, younger mothers also received *ePregnancy* without a formal subscription. Along with this unusual attribute and its “trendy” nature, *ePregnancy* was selected for analysis in the group.

Initially, the author of this study hoped to include *Lamaze Parents Magazine* to determine if there were variances in advertising between the traditional consumer-oriented parenting publications and the holistic health and fitness genres. *Lamaze Parents Magazine* was not included due to extreme difficulty obtaining copies of the publication

for the sample year and the fact that it is a quarterly publication which would have conflicted with the monthly publication sampling unit.

### **Coding**

Once the magazine sample was defined, mutually exclusive category definitions were derived from research findings obtained from the literature review concerning both cognitive and behavioral variables of breastfeeding issues (Sheeran et al., 1999). Every category included a choice to ascribe acceptable claims by infant formula advertisers “to avoid the implication that every claim must fall into one of the misleading/deceptive categories” (Carlson, Grove, & Kangun, 1993, p. 30).

In the analysis of alcohol magazine advertisements, Cui (2000) explicitly defined each advertising appeal in the coders’ manual, performed several training sessions with the coders, and allowed all coders to analyze ten alcohol advertisements found in the same issue of a magazine in order to produce a 92percent agreement across all coding categories (p. 285). With minor adjustment to content, Cui’s methodology for inter-coder reliability in alcohol advertisements was used for this study.

A pre-test coding session was conducted prior to the group coding. Two coders met for three hours and each coded six infant formula/breastfeeding advertisements and four articles. Based on comments that arose from the pre-test, several questions were better defined and several questions were discarded. The author also produced a separate sheet to fully describe the “type of appeal” variable due to its confusing nature. After the sheet was developed and definitions refined, the coders met with 93percent approval using Holsti’s formula for inter-coder reliability.

After the inter-coder reliability was established, eleven coders were selected. Two females and one male were from the age demographic more than 50 years of age. Three females and three males fell in between the 20 to 30 year mark and two females composed from the 30 to 49 age demographic. Although gender and age was adequately distributed, the author hoped to involve more ethnicities in the study; there were no African American coders. Also, the coders were primarily middle-class Caucasians with some post-secondary education. Six of the female coders had at least one child. Two of them breastfed exclusively for a minimum of six months; another breastfed at the hospital but did not continue upon discharge; the remaining three indicated that they bottle-fed their children with infant formula from birth until age one or two, never breastfeeding.

Coders met for three sessions, lasting from four to five hours in length. At the beginning of each session, the author described each coding sheet for infant formula and breastfeeding product advertisements along with breastfeeding-related articles. All coders used the same sheet and examples were given as well as answering any questions the coders discerned from coder's manuals, individual pre-test examples of magazine ad and articles, and any other the materials. Once coders refrained from questions and agreed they felt comfortable with the materials, the author remained in the room for observation.

Wang (2003) pointed out that "Advertisements need to be understood as products first, texts second" (p. 247). In this study, coders analyzed the advertisements as both textual and visual elements. Shields (1990) noted that both the visual and textual elements must be analyzed in advertising content analyses in order to reflect dominant ideological structures such as gender, race, ethnicity, and class (p. 25; see also Valdivia, 1995, p. 187). Cui (2000) described that it is important to consider both verbal and

graphic content in order to determine primary advertising appeal; the text-free Marlboro man campaign is a perfect example of the powerful and successful use of visual imagery (Hawkins & Curtis, 2000, p. 85). (p. 285). Anytime the issue of sex is raised, as it frequently is in breastfeeding discourse, it is critical to look at visual imagery because it is such a powerful aspect of sexual suggestion (Venkatesan & Losco, 1975, p. 53).

### **Definitions and Variables**

Several definitions were critical to understanding the basis of the study; a copy of the complete coder protocol (or coding definition manual) is included in the appendix (see Appendices A-D). Breastfeeding referred to the action of supplying an infant nutrition through the mother's breast. To account for potential advertisements that may have otherwise been discarded in the breastfeeding product section, breastfeeding also included the action of collecting expressed breast-milk and feeding the infant breast-milk in a bottle. Formula-feeding described the act of feeding an infant prepared infant formula by bottle.

In order to place the whole infant feeding scenario in context, articles as well as advertisements were analyzed. The article type variable referred to several categories including news briefs, traditional articles or feature stories, as well as general interest items such as advice columns, editorials, and letters to the editor (Davidson & Wallack, 2004, p. 113).

While the word "breast-milk substitutes" was the preferred method of referring to such products, the term "infant formula" was used in this study in order to avoid any possible confusion. WHO/UNICEF defined breast-milk substitutes as "Any food being marketed or otherwise represented as a partial or total replacement for breast-milk,

whether or not suitable for that purpose” (WHO, 1981, p. 13). The WHO distinguished infant formula from breast-milk substitute by defining infant formula as:

A breast-milk substitute formulated industrially in accordance with applicable Codex Alimentarius standards, to satisfy the normal nutritional requirements of infants up to between four and six months of age, and adapted to their physiological characteristics... (WHO, 1981, p. 14).

The term “new mother” referred to women in both the prenatal and gestational cycles including the time of conception up to the infant’s first year of life. This time period was selected based on the one-year duration period recommended by the American Academy of Pediatrics for optimal benefits for both mother and child (Shelov, 2004, p. 80; see also Meek, 2002, p. 158).

In the International Code of Marketing of Breast-milk Substitutes, “marketing” is defined as “product promotion, distribution, selling, advertising, product public relations, and information services” (WHO, 1981, p. 15). This study focused on ads placed in magazines that targeted expectant or pregnant women, new mothers, and women in the early phases of conception. The term “breastfeeding product advertisements” referred to any advertisement that marketed products that enable or facilitate breastfeeding including but not limited to clothing (nursing bras/shirts), manual or automatic breast pumps, feeding supplies (pumping systems, milk storage systems), medication (nipple creams, gels, heating/cooling pads), and hygiene products (breast pads). Because bottles, artificial nipples, and related feeding systems could be used for both breastfeeding and infant formula-feeding, a separate variable was designed for these products.

Carlson, Grove, and Kangun (1993) analyzed the deceptive practices of environmental advertising by considering violations of the expressed concerns of states’ attorneys general and FTC court decisions (p. 33). A similar approach was used in this

content analysis by looking at aspects of advertising that violated the International Code of Marketing of Breast-milk Substitutes (1981); see Appendix E for articles of the Code that were tested in this study.

The International Code of Marketing of Breast-milk Substitutes specifically prohibited advertising in Article 5 Section 1: “There should be no advertising or other form of promotion to the general public...” (WHO, 1981, p.16 - 20). Then, advertising, and any form of it was a direct violation of the International Code of Marketing of Breast-milk Substitutes. To determine the extent of these violations, however, the content analysis looked at violations of the articles addressed to health workers, labeling, and the general public.

When infant formula advertisements used scientific-sounding ingredients such as “DHA” and “RHA” to tout their products’ similarities to breast-milk, this was implying that the artificial was as good as the real thing (see Figures 3 and 6). Variables were not indicated as positive or negative on the coding sheet in prevention of tainting the coders minds as to what was “good” and what was “bad,” thus, leaving the coding segment strictly objective. However, implying that infant formula is similar to breast-milk is a violation of the International Code of Marketing of Breast-milk Substitutes; and, will be considered a negative variable.

Mimicking breast-milk is medically impossible not only because milks vary between individuals but also because breast-milk is a complex composition, constantly changing during lactation, during the act of suckling, during the time of day, and during the infant’s growth cycle (Mephram, 1991, p. 31). Additional negative variables considered in this segment included the frequency of the word “breast-milk” within the



Similac® Advance® can help develop both your baby's immune system and brain like breast milk.

(Kisses, hugs, and silly songs are up to you.)



Breastfeeding is recommended for its many benefits. If you choose to feed formula, ask your doctor about Similac Advance.



Only Similac Advance with DHA and ARA has both\*:

- A patented blend of special breast milk nutrients called nucleotides, which has been clinically shown to help support the development of a baby's immune system like breast milk. *The clinical study showed immune cell development like breast milk. Whether this development provides immune protection like breast milk has not been shown. Breast milk also contains antibodies not found in infant formulas that are important for a baby's immune protection.*
- Published long-term clinical research showing brain development like breast milk.\*

So much like breast milk in so many ways.

\*Among formulas with DHA and ARA; infants studied at 12 and 39 months of age. ©2004 Abbott Laboratories.  
www.SimilacAdvance.com

**Figure 6. Comparing Infant Formula to Breast-milk.** Advertisement for Similac Advance found on the back cover of *American Baby* magazine, April 2004 issue. This ad contained 10 Breast-milk references and mention of “DHA” and “ARA,” references to research, and small print.

advertising text as well as small print and scientific-sounding ingredient labels such as “DHA” or “RHA” (see Figures 6 and 7). Indeed, it has been discovered that small print or legal statements concerning the research touted in the ad should be seen as a warning sign to be suspicious of the findings: “When financial ties exist between researchers and the medical industry, the results of a study are 3.6 times more likely to be pro-industry” (Abramson, 2003, p. 54).

Many feminists reject breastfeeding because of its constraints on equal participation in the labor market; other feminists fight against the medical male hegemony’s control of birthing rights and other areas of reproduction (Mephram, 1991; see also Chetley, 1986; Van Esterik, 1989; Walker, 1990, p. 33). While these opposing arguments entail traditional social and biological roles contrasted with modern values of individualism and emancipation, they both consider breastfeeding as a cultural-political phenomenon. The following variables were analyzed based on prior research concerning beliefs and stereotypes about breastfeeding.

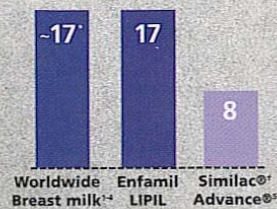
The enslavement/empowerment theme was analyzed by defining the female’s role in advertisements as well as considering any males present in the ads or articles. Are breastfeeding mothers portrayed differently than formula-feeding mothers? Is the environment public or private (see Figures 4, 6, and 8)? Is the mother wearing casual clothing or business clothing (see Figures 9 and 10)? Is she in lingerie, a matronly gown, or a bathrobe (See Figure 4)? Do the articles suggest tradition with phrases such as “humans have been doing it for thousands of years” or “what do you think they did before formula and running water?” Are the words “natural” or “Mother Nature” used?



**Enfamil® LIPIL® with Iron helps nurture that development.**

Only Enfamil has LIPIL, a unique blend of DHA and ARA, important nutrients also found in breast milk that support brain and eye development. And Enfamil LIPIL with Iron has levels of DHA and ARA similar to worldwide breast milk.

**Compare  
DHA LEVELS**  
mg/100 Cal



Ask your baby's doctor about Enfamil LIPIL with Iron, from the formula maker doctors have trusted for nearly 100 years. Because now, she looks to you for everything she needs. Including a great start in life.



This graph represents compositional differences only. No studies conducted between Enfamil LIPIL and Similac Advance regarding performance.

\* Middle of worldwide breast milk averages (25th-75th percentile range of 0.20% to 0.40% of total fatty acids), assuming about 50% of calories from fat.

<sup>1</sup> Similac® and Advance® are registered trademarks of entities unrelated to Mead Johnson & Company.

<sup>2</sup> Jensen RG. Lipids in human milk. *Lipids*. 1999;34:1243-1271. <sup>3</sup> Innis SM. Human milk and formula fatty acids. *J Pediatr*. 1992;120:S56-S61.

<sup>4</sup> Koletzko B, Thiel J, Abiodun PO. The fatty acid composition of human milk in Europe and Africa. *J Pediatr*. 1992;120:S62-S70. <sup>5</sup> Data on file.

<sup>5</sup> Calculated from data on Ross Products Web site. Ross Product Handbook. Available at: <http://www.ross.com/productHandbook/pepNut.asp>. Accessed February 5, 2003.

[www.enfamil.com](http://www.enfamil.com) 1-800-BABY-123

©2003, Mead Johnson & Company.

**Figure 7. Small Print.** The print in this ad was quite small. It also contained references to research and comparisons to breast-milk. This inside cover, two-page spread advertisement for Enfamil with Lipil and Iron was found in *American Baby*, March 2004 issue.





er  
20  
years  
serving nursing moms!

# breastfeeding?

Motherwear is for you!

At home, at work, or on-the-go, breastfeed with confidence and style.

Motherwear offers a full line of nursing tops, dresses, sweaters, and lingerie including a complete selection of nursing bras in sizes 30A to 50J. We've been making breastfeeding easier and more discreet for over 20 years and offer a 100% satisfaction guarantee.

Call 800 633 0303 or visit [motherwear.com](http://motherwear.com) to request your free color catalog. You'll be able to nurse anywhere in your Motherwear clothes.

free catalog!

 **Motherwear™**  
confidence, comfort, and style for breastfeeding moms  
call us at 800 633 0303 or visit [motherwear.com/ep](http://motherwear.com/ep)

**Figure 8. Public Environment.** This advertisement illustrated a mother breastfeeding in a public environment. There was no unusual amount of skin showing while she breastfed. This advertisement was found in *ePregnancy*, June 2004 issue.





**Figure 9. Professional Clothing/Environment.** This advertisement illustrated a woman in professional clothing. Although the environment could be a home office, it implied that she holds some type of professional capacity. This Avent ad for a breast pump was located in on page 5 of *American Baby*, August 2005 issue.



#1 Choice of  
Lactation Consultants

# my Brest & friend

The most supportive pillow for successful breastfeeding.



**The Only Breastfeeding Pillow Recommended by Kathleen Huggins, Best-Selling Author of the Nursing Mother's Companion.**

"The My Brest Friend pillow was designed for one purpose; to properly support mom and baby during breastfeeding. Other nursing pillows and multi-purposed, crescent-shaped pillows aren't secure and don't fully wrap-around the body. As a result, they can shift, forcing mom to constantly readjust; this can add up to difficulty with positioning and latch-on. No other pillow provides as much support, comfort, and security for your breastfeeding ease. My Brest Friend is the only nursing pillow that I recommend to breastfeeding mothers."

*Kathleen Huggins*  
Endorsed by Kathleen Huggins, RN, MS, IBCLC  
Best-selling Author of the "Nursing Mother's Companion" and Expert on breastfeeding



Zenoff Products, Inc.  
35 Leveroni Ct. Novato, CA 94949  
tel: 415 883 5300 fax: 415 883 5399  
email: pmacomber@zenoffprod.com  
[www.mybrestfriend.com](http://www.mybrestfriend.com)

**Figure 10. Casual Clothing and Minimal Skin Showing.** This advertisement illustrated a casual type of clothing. The model was barefoot and there was minimal amount of skin showing. The advertisement was located in *ePregnancy*, December 2004/January 2005 Issue, page 3.

Women's self-confidence is a major player in both infant formula advertising and articles about breastfeeding. Self-confidence is directly related to status appeals in the ads and articles. The woman's status became apparent by her method of feeding her baby just as she revealed her status by which brand of napkins she uses for dinner parties. Typical indicators of status include ethnicity, gender, environment, and marital or employment status.

Another critical variable was the ethnicity of the mother; is she African American, White, Latino, or Asian (see Figures 4 and 11)? Ethnicity was a critical variable given the trend that "The examples of breastfeeding in public that reach the newspapers are always to do with white middle-class urban dwellers" (Bartlett, 2000, p. 111). This implied that it is scandalous for white women to breastfeed but expected of non-whites. Indeed, non-white and poor women's "mothering practices have historically been treated with suspicion and as contingent upon state approval" (Hausman, 2000, p. 286).

Analyzing the model's social status did not stop with her ethnicity. Is the woman in the picture single or married? Is she pictured with a wedding ring or is there a father/male in picture (see Figures 12 and 13)? Is a father administering the baby's milk rather than the mother? Dettwyler (1995) found that images of breastfeeding sometimes pictured a man in the background performing typically female duties such as cooking or caring for other children, implying that breastfeeding is time consuming and women who choose to do so must have lots of help in order to be successful (referenced in Nadesan & Sotirin, 1998, p. 223).

The gender discussion did not end with the adult. There is disparate literature concerning gender distinction of babies in breastfeeding advertising. In breastfeeding



No other formula does more for baby's well-being today & tomorrow.

DHA & ARA, nutrients found in breastmilk & Comfort Proteins

New Nestlé® Good Start® Supreme DHA & ARA is the only enriched-lipid formula specially designed with easy-to-digest Comfort Proteins.\* All DHA & ARA formulas are designed to support baby's brain and eye development with nutrients found in breastmilk, baby's ideal food. But Good Start Supreme DHA & ARA is the only one made with Comfort Proteins to be easy on your baby's tummy. During all babies' first year their tummies are still developing. That's why all Good Start Supreme formulas are made with Comfort Proteins that are broken down into smaller pieces to be easy to digest. No other DHA & ARA formula takes this extra step. So you two can embrace every moment together.

NEW Nestlé GOOD START. INFANT FORMULA WITH IRON DHA & ARA SUPREME

It's the Good Start that will last a lifetime™

© 2003 Nestlé

**Figure 11. Ethnicity of Mother.** This advertisement illustrated an Asian model. This advertisement was located on the inside cover of *American Baby*, February 2004 issue.



Now there's a DHA & ARA formula that makes you both feel good.

DHA & ARA, nutrients found in breastmilk & COMFORT PROTEINS

NESTLÉ GOOD START® Supreme DHA & ARA is the first and only enriched-lipid formula with easy-to-digest COMFORT PROTEINS®. All DHA & ARA formulas are designed to support baby's brain and eye development with nutrients found in breastmilk, baby's ideal food. But GOOD START Supreme DHA & ARA is the only one made with COMFORT PROTEINS to be easy on your baby's tummy. During all babies' first year their tummies are still developing. That's why all GOOD START Supreme formulas are made with COMFORT PROTEINS that are broken down into smaller pieces to be easy to digest. No other DHA & ARA formula takes this extra step. So you two can enjoy every moment together.

It's the Good Start that will last a lifetime™

All trademarks are owned by Société des Produits Nestlé S.A., Vevey, Switzerland.

The advertisement features a large background image of a woman's hand holding a baby's foot. A blue banner with white text curves across the middle. Below the banner, a paragraph of text describes the formula's benefits. At the bottom left is a can of Nestlé Good Start Supreme DHA & ARA infant formula. To the right of the can is a collage of four small photographs showing a family: a mother feeding a baby, a mother and child playing, a child with flowers, and a child reading a book. A gold banner with the slogan 'It's the Good Start that will last a lifetime™' is positioned below the collage. A small disclaimer at the bottom right states 'All trademarks are owned by Société des Produits Nestlé S.A., Vevey, Switzerland.'

**Figure 12. Wedding Ring** .This advertisement illustrated the presence of a wedding ring on the female model's hand. This ad for Nestlé Good Start infant formula was located on page 18 of *ePregnancy*, July 2004 issue.



— Introducing breastfeeding for dads. —



Now there's a VentAire® Bubble Free bottle that's specially made for breast-fed babies.

Dads may not have the right equipment for breastfeeding, but with the new VentAire® NaturalShape™ Bubble Free bottle they can come close. Because it has a specially designed nipple that's both shaped and textured more like the breast to encourage proper latch-on. And unlike ordinary reusable bottles, all our VentAire bottles have our unique bubble free vent so there's less gas, spitting up and colic for baby. Which makes it a whole lot easier for

**Playtex VentAire®**  
Bubble Free Bottles

Looks different. Works better.™



©2004 Playtex Products, Inc.

**Figure 13. Male (Father Figure) in Ads.** Very few ads pictured a male or father figure. This ad for Playtex Ventaire Bubble Free Bottles was found on the inside cover of *American Baby*, June 2004.



medical literature, however, there is analysis of gender in which the baby is almost always referred to as “he,” through which the author indicates it is “to enhance clarity between reference to mother or child” (Lawrence, 1994, p. xiii-xiv; quoted in Hausman, 2000, p. 278). Considering the visual element in advertisements, textual clarity is nonessential and a distinction in the baby’s gender could lead to discussions concerning traditional stereotypes opposing “science vs. anecdote, physician vs. mother, male vs. female” (Hausman, 2000, p. 278).

Working women compose a significant part of the magazine readership with big buying power, so magazine editors and advertising executives appeal to them. Variables in relation to this included the woman’s clothing (professional or casual), her surroundings (home or work-related) (see Figures 4, 9). Or, in articles about breastfeeding, did themes appear such as difficulty pumping at work, embarrassing situations (breast-milk in coffee or leaking through clothing) (see Figure 14)?

New mothers, returning to work soon, are very concerned about sleep. Because breast-fed babies eat more frequently, the new breastfeeding mom will have less sleep than the formula-feeding mom. One infant formula company used the text: “We’ll be there for you in the hospital, too,” which left the question, “Who will be there for you if you breastfeed?” In addition to this, the “Literature from formula companies has stressed the importance of getting a full night’s sleep, without mentioning that infants obtain one-third of their nutrition from these nighttime feeds” (Baumslag and Michels, 1995, p. 95). Other variables that were considered included appeals to fix “fussy babies” or images of babies, eyes closed or drifting asleep.

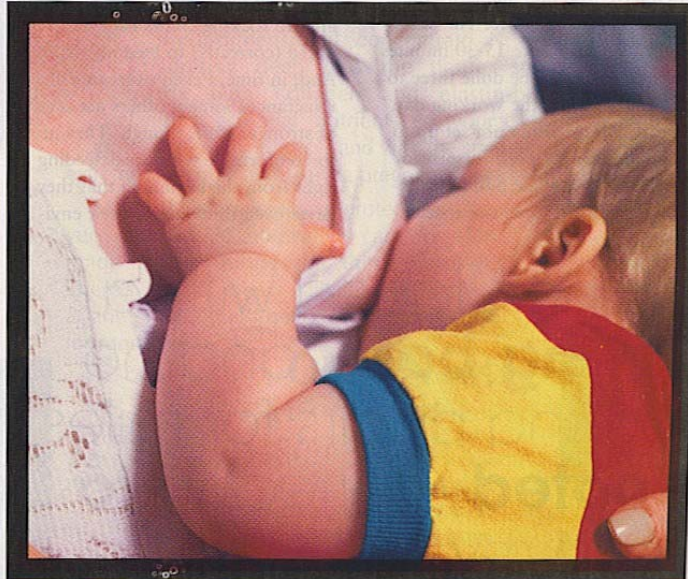
of humor. And remember, for all the memorable, strange and funny moments that occur while breastfeeding in public, most of the time it can be accomplished so discreetly and matter-of-factly that passers-by don't even realize it is happening.

#### When Necessity Knocks

As prepared as you might think you are, you can count on the fact that your darling baby will be hungry at the most inopportune moments. Ask Kay Bolden of Joliet, IL. When security guards in St. Paul's Basilica in Rome insisted she quiet her fussy baby, she took the most expedient course — she sat down on the floor and fed him. Says Bolden, "They weren't too happy with how I did it, but he fell asleep pretty quick and all was well."

Sandra Ray found herself nursing her 5-day-old daughter in a tire store. She says, "Can you imagine? A tire store filled with men — not a woman in sight, mind you — trying to divert their attention while I positioned a newborn for nursing." She was as discreet as possible and kept a blanket over herself and her baby. "Still, it was great watching their expressions while they tried not to watch us!"

Nearly every **breastfeeding** mother has a story to tell about how she survived an **embarrassing** or unusual breastfeeding **moment**.



February 2004 | ePregnancy 121

**Figure 14. Article Images and References to Breastfeeding Situations.** This article referred to negative variables associated with breastfeeding, such as embarrassing moments and "inappropriate" or embarrassing public feedings. The article was located on page 121 of the February 2004 issue of *ePregnancy*.

## RESULTS AND DISCUSSION

The general sample included the year 2004 with some issues combining the first/last months of the 2004/2005 year, including 128 infant formula ads, 122 breastfeeding advertisements, and 57 total articles in the sample. As for the size of the ads, both infant formula and breastfeeding product advertisers preferred the full page size of ads (59.4 and 55.7 percent respectively). However, for the advertisers' second highest ranking size, infant formula advertisers selected the two-page spread more frequently. Breastfeeding product advertisers used the column length size of ad as the next highest ranking option. Infant formula advertisers, however, chose to locate those ads in the more expensive sections of the magazine (cover, back, and first five pages). Breastfeeding ads were more equally distributed throughout the magazine.

Infant formula advertisements used the ration/Marshallian appeal in 32 percent of the ads, making it the leading type of appeal (see Appendix D for a detailed description of appeal types). The main slogan of the infant formula advertisements was overwhelmingly a comparison to breast-milk's physiological development at 68.5 percent. Most of the breastfeeding advertisements theme or slogans could not be placed into a category and were coded as "other" (32.8 percent). The type of appeal in breastfeeding advertisements was coded as Routine/Pavlovian appeal at 36.9 percent.

When separating the number of both breastfeeding and bottlefeeding product ads by month, infant formula ads drastically outnumbered breastfeeding ads in the months of July (16:5) and October (14:7). For the remainder of the sample year, both product ads were fairly equal in number, except for the month of April, in which *ePregnancy* had 11

articles (surpassing *American Baby* with one and *Parenting* with zero). *American Baby*, incorporated five articles in its September issue, was the magazine with the next highest frequency of articles in one month. There were only seven total articles in all three magazines combined for the month of August, national breastfeeding awareness month.

Articles only were selected if they included the word “breastfeeding” in the main headline or if the article used a photograph or graphic that depicted the act of an infant feeding by bottle or by breast. Forty-three percent of these articles were one-page in length and 69.2 percent were categorized as the traditional magazine news/feature story. And, 19.3 percent of these articles were coded as “instructional,” indicating how to..., milk storing/preparation methods, etc.

Fifty-six percent of the articles lacked images related to breastfeeding or bottlefeeding. There was no mention of failure words in 61.4 percent of the articles either. Similarly, there was minimal frequency “public embarrassment,” or “disgusting” negative-type variables between all three magazines as a whole. Nor was there much mention of positive type variables such as “convenience,” “bond,” “environmental,” “nature,” or “economy.” There were differences between the positive negative variables within the three magazines individually, which will be discussed further in research questions one and two.

Variable percentages of advertisements and articles will do little to illuminate the overall picture unless the all three publications are compared via their advertising and article orientation. Oriented more towards infant formula advertising, *Parenting* had a total of 50 infant formula advertisements. *American Baby* had 49 infant formula advertisements; *ePregnancy* had 29. Although *American Baby* had the most breastfeeding

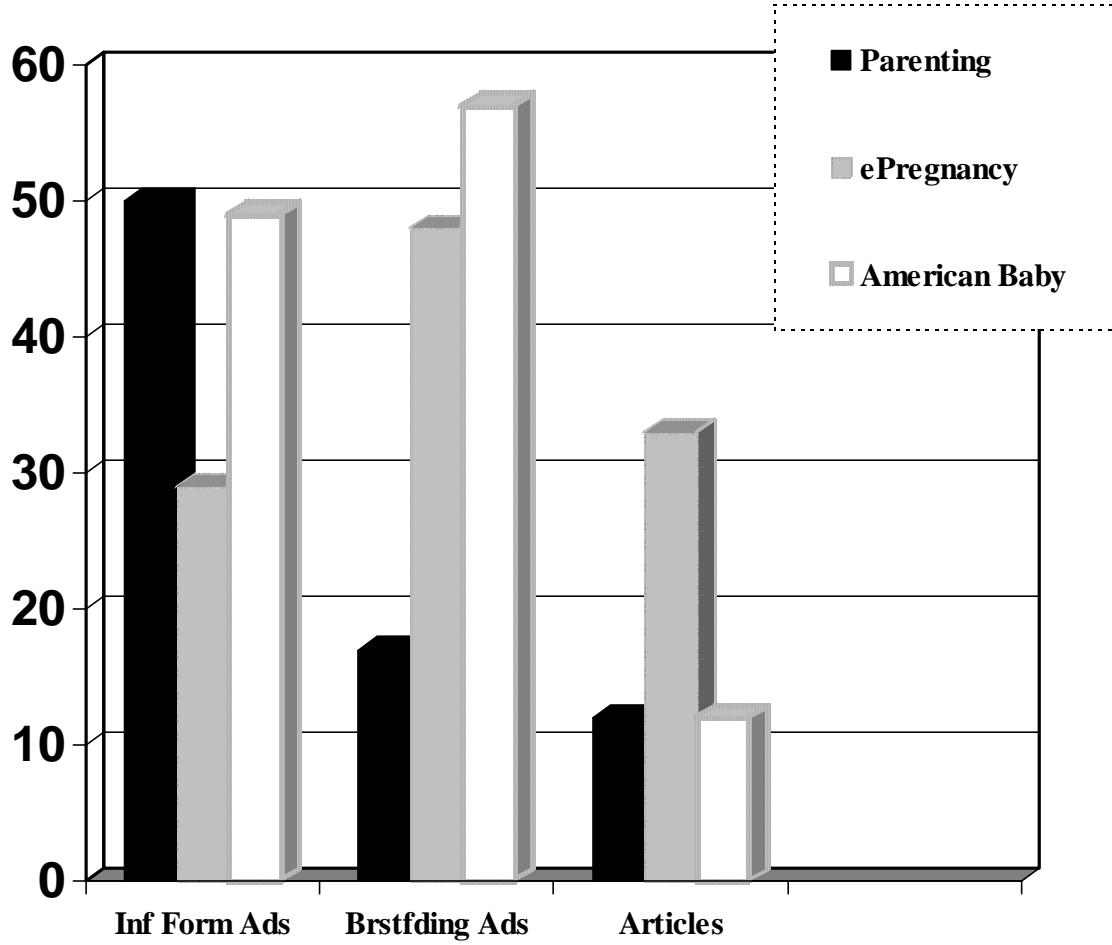
ads, *American Baby* was identified as the neutral magazine because it represented the nearest equal distribution of breastfeeding product ads and infant formula product ads between the three magazines. Therefore, *Parenting* magazine was labeled as the magazine oriented mostly toward infant formula product advertising.

When breastfeeding advertisements were considered, *Parenting* had 17, *American Baby* had 57, and *ePregnancy* had 48. Because it indicated the greatest difference in frequency between breastfeeding ads versus bottlefeeding ads, *ePregnancy* was labeled as the most breastfeeding advertisement-oriented magazine. With 57.9 percent of the breastfeeding articles, *ePregnancy* also surpassed the other two magazines with breastfeeding articles—making it the most breastfeeding article-oriented magazine as well (see Tables 2 and 3).

**Research Question One: Do Magazines with a Higher Level of Infant Formula Product Advertising Present Breastfeeding More Negatively in Articles Related to Infant Feeding than Magazines with Less Infant Formula Product Advertising?**

The most infant formula advertising oriented publication in the sample, *Parenting*, had only one article that mentioned the word pain and one article that discussed public embarrassment, variables associated with negative stereotypes. Six articles discussed problems associated with breastfeeding and five used “failure” terms. *Parenting* illustrated six images of women breastfeeding within 12 articles total—fairly close to *ePregnancy* (the more breastfeeding-oriented publication) who illustrated seven out of 33 total articles. While *Parenting*’s advertising stemmed mainly from infant formula ads, the magazine did not present breastfeeding more negatively than did *ePregnancy*. Thus, the answer to research question one is no.

**Table 2. Magazine Orientation**



*Note.* Infant Formula Ads (N = 128). Breastfeeding Ads (N= 122). Articles related to breastfeeding (N= 57).

**Table 3. Parenting and ePregnancy Differences on Positive/Negative Variables**

<i>Negative Variables</i>	<i>Parenting</i>	<i>ePregnancy</i>
Pain	1	11
Embarrassment	1	6
Problems	6	21
Failure	5	14
<i>Positive Variables</i>		
Emotional	3	13
Bond	0	10

*Note.* Table considers only articles related to breastfeeding (N= 57).

**Research Question Two: Do Magazines with a Higher Level of Breastfeeding Product Advertising Present Breastfeeding More Positively in Articles Related to Infant Feeding than Magazines with Less Breastfeeding Product Advertising?**

*ePregnancy* led the other two magazines with reference to “pain” and problems in general. But, *ePregnancy* also lead the magazines in the variables that included emotional and bonding references.

For instance, *ePregnancy* led the three magazines with the highest percentage of breastfeeding articles, comprising 57.9 percent. In *ePregnancy*, articles that discussed problems outnumbered articles that did not mention problems (21:12). Although articles that mentioned pain in *ePregnancy* were less than those that didn’t (11:22), *ePregnancy* led all the magazines with the highest percentage of articles that did mentioned the word “pain” (11 for *ePregnancy* and two for *American Baby* and one for *Parenting*). Along this same trend, *ePregnancy* led all three magazines with the mention of “emotional” (13:20) or “bond” (10:23) words (whereas two for *American Baby* and zero for *Parenting*).

So, the answer to research question two is no; magazines with a high level of breastfeeding products did not present breastfeeding more positively in articles than did magazines with lower levels of breastfeeding products. In fact, the magazine with the most breastfeeding product advertisements was also the magazine that mentioned more negative words about breastfeeding (such as problems and pain) than any of the other magazines.

**Research Question Three: What are some of the Differences between Infant Formula Product Advertisements and Breastfeeding Product Advertisements?**

The third research question included variables such as the presence of males, siblings, wedding rings, the environment in which the ad takes place, and the level of



sexuality present in the ad. Overall, the presence of males (father figures) in advertisements from both infant formula and breastfeeding advertisements was non-existent. In infant formula advertisements, more than 99 percent lacked any male figure.

However, the case was virtually the same with breastfeeding advertisements; only 6.6 percent (8 out of 122 total ads) pictured a male figure in the ads. Another similarity between infant formula and breastfeeding advertisements was that neither illustrated additional children (siblings); more than 95 percent did not picture siblings in both cases.

One area in which a small difference was detected dealt with the wedding ring variable. Infant formula ads illustrated that more than 25 percent of the female models were wearing wedding rings and slightly more than four percent were not wearing wedding rings. Breastfeeding ads indicated a more equal distribution with 13.9 percent wearing rings and 12.7 percent not wearing wedding rings. The remaining percentages in both cases was that the coder either could not determine if the female was wearing a ring (due to positioning or cropping) or that there was no female in the ad.

While both breastfeeding and infant formula feeding ads pictured environments that were ambiguous or too general to classify as inside or outside (more than half of the sample), the next likely option for infant formula product advertisements was for the environment to be in the living area of the home (19.5 percent) and outside/nature areas (10.9 percent). The breastfeeding ads displayed the environment mostly in the living area of the home (18 percent) and either the baby's room or nursery (10.7 percent) or adult bedroom (8.2 percent).

When concepts of the quasi-sexual nature of breastfeeding and variables taken from literature and surveys are considered, the following findings were discovered. More

than 50 percent of the babies pictured in both infant formula and breastfeeding product ads were unidentifiably male or female. However male and female babies were more equally distributed between infant formula ads (28.4 and 16.7 percent respectively). On the other hand, breastfeeding ads were more likely to illustrate a male child (22.5 percent) than a female child (5.6 percent).

When the estimated age of the child in the ad was evaluated, breastfeeding and infant formula ads generally presented a child that was difficult to pinpoint age. However, the next highest percentage of infant formula ads pictured a baby that was sitting upright (26.9 percent) while breastfeeding ads pictured a newborn (46.8 percent).

The garments of the mother in the ad also illustrated a small difference between breastfeeding and bottlefeeding ads. In the breastfeeding ads, 11.4 percent (nine out of 79 ads) of ads pictured females wearing nightgowns. Only 2.8 percent (two out of 71 ads) of infant formula females were wearing nightgowns. Breastfeeding females were pictured in lingerie in 15.2 percent of the ads while infant formula females were shown in lingerie only 4.2 percent. Both cases illustrated a comparable percentage of women in professional (14.1 percent for infant formula ads and 12.7 percent for breastfeeding ads) and casual garments (67.6 percent in infant formula ads and 49.4 percent for breastfeeding ads).

There was a difference in the amount of skin showing between infant formula and breastfeeding product ads. The “amount of skin showing” variable was measured by five categories: lots of skin showing (open bath robe, neck and part of shoulders revealed, lingerie), minimal skin showing (button shirt with part of chest area showing), no unusual skin showing (T-shirt, turtleneck, fully-buttoned blouse), and categories such as “cannot

determine” or “no mother pictured in ad.” Within these categories, 77.9 percent of infant formula ads had “no unusual amount of skin showing” with only 1.5 percent of the advertisements coded as “lots of skin showing.” On the other hand, 26.9 percent of breastfeeding advertisements were coded as showing lots of skin.

There was no significant difference between race and amount of skin showing in either breastfeeding or infant formula product advertisements. However, when only ethnicity was considered, there were several findings that varied between product definitions. In infant formula advertisements, 76.2 percent of the females/models were coded as white. In breastfeeding advertisements, 84.5 percent were white. Breastfeeding advertisements had a 4.8 percent occurrence of African American models and a 4.8 percent occurrence of Latino models. In contrast, the infant formula advertisements had 13.1 African Americans, 1.2 percent of Latino/Hispanic models, and 8.3 percent of Asian female models.

While much research has centered on deterrents to breastfeeding, mentioned earlier in the literature, several publications have presented findings that breastfeeding was treated as an act that requires constant medical monitoring. Several variables related to this stereotype, such as research cited and small print (below a nine-point font, or in which the reader had to move the advertisement physically closer to his/her eyes in order to read the small print). Infant formula ads included small print in 66.4 percent of the sample. On the contrary, only 41 percent of breastfeeding ads used small print. Along the same trend, research findings were cited in 43.8 percent of the infant formula ads; 36.9 percent of breastfeeding ads cited research. Abramson (2003) discovered that small print

or citing of research was a warning sign to the validity of possible industry-funded research.

Infant formula companies incorporated the antithesis of breastfeeding stereotypes into the imagery and text of infant formula product advertising. Breastfeeding companies reiterated negative stereotypes about breastfeeding into breastfeeding product advertisements.

**Hypothesis One: Magazines Will Present Breastfeeding Differently Based on the Level of Infant Formula and Breastfeeding Product Advertising within that Magazine.**

To summarize, infant formula advertisements steered away from negative representations of breastfeeding and replaced the void with positive reinforcements about infant formula-feeding, with imagery such as a mother casually dressed in a public environment participating in social activities with others outside of the home. Breastfeeding-related articles presented breastfeeding as an objective, “How To” subject—not the negative frame that was expected. Breastfeeding product advertisements were the only segment of the magazine that catered to negative stereotypes about breastfeeding, such as findings that the mothers were showing lots of skin, wearing lingerie, in a bedroom, away from social activities with only the newborn around.

Thus, the first hypothesis must be rejected. Based on theories that magazines cater to their advertisers, it was discovered in this study that the magazines that would be the most likely to present breastfeeding positively based on high levels of breastfeeding product advertising, were the magazines that presented a more negative image of breastfeeding. Breastfeeding ads catered to negative stereotypes associated with breastfeeding. Thus, magazines with a high level of breastfeeding ads also had a high

level of negative stereotypes. To compound this effect, within those magazines with high levels of negative visual and textual stereotypes within the ads, the articles also mentioned pain and problems more than articles in other magazines.

#### **Research Question Four: Do Infant Formula Companies Violate the International Code of Marketing of Breast-milk Substitutes?**

While the marketing infant formula products directly to pregnant women is, in itself, a direct violation of the International Code of Marketing of Breast-milk Substitutes, the author took into account violations evident in the sections regarding “Information and Education,” “The general public and mothers,” “Health workers,” and “Labeling” to understand fully how infant formula manufacturers adhered to the provisions of the code in its intentions.

Article Four Section Two stated that “Such materials should not use any pictures or text which may idealize the use of breast-milk substitutes”; 78.9 percent of the infant formula advertisements pictured a human child. Within those ads that pictured a human child, 90.7 percent illustrated the child as content, happy and laughing with only 1.9 percent sleeping/eyes closed.

The next variables related to Article Five Section Two of the International Code of the Marketing of Breast-milk Substitutes stating that: “Manufacturers and distributors should not provide, directly or indirectly, to pregnant women, mothers, or members of their families, samples of products within the scope of this Code.” Indirect indications of this article include a reference to a phone number or website in which personal information such as e-mail address, phone numbers, or mailing addresses could be collected. This allowed for distributors to send free samples, coupons, and educational booklets, baby bags, or bottle samples to pregnant/nursing mothers directly. Infant

formula advertisements referred readers to a telephone number in 69.3 percent of the ads and to a Web site in 95.3 percent of the ads. However, only 18 percent of the ads referred the reader to a mail-in rebate or gift offer.

And, finally the remaining variable that relates to the adherence to the International Code of Marketing of Breast-milk Substitutes involved Article 7 Section 2: Information provided by manufacturers and distributors to health professionals regarding products...that bottlefeeding is equivalent or superior to breast-feeding (reiterated in Article Nine “Labeling,” Sections 1 and 2). This included the number of times the word “breast” or “breastfeeding” was mentioned. Overall, the average mean between all three magazines was more than two mentions of a breast or breastfeeding-related word per advertisement. However, some infant formula advertisements contained as many as nine references to the breast (see Figure 4). Similac and Enfamil led the infant formula cases by product brand category in number both indicating a 36 percent of sample size. And, 71.7 percent of the infant formula advertisements promoted their brand as a breast-milk substitute, with Similac, Enfamil, and Nestlé leading the brands in this type of product promotion. Advertising of product as a “Breast-milk supplement” occurred in only 3.1 percent of the total sample.

**Hypothesis Two: Infant Formula Companies will Violate the International Code of Marketing of Breast-milk Substitutes in their Advertisements.**

This hypothesis was accepted. In the major category areas of Articles Four, Five, Seven, and Nine, infant formula advertisements violated the International Code of Marketing of Breast-milk Substitutes in their advertisements as outlined above.

## **SUMMARY AND CONCLUSIONS**

The findings can be broken down into four general segments: data that deals with the image and appeal of ads, data that deals with the articles, data describing article content in relation to the context of magazine advertisements, and violations of the International Code of Marketing of Breast-milk Substitutes. Acceptance of the third hypothesis was no surprise; many authors and non-governmental think tanks continually document infant formula companies' violations of the Code. However, it was surprising to reject the first hypothesis, especially considering the socio-cultural environment presented in the magazines and in the modern, "real" world.

### **The Socio-cultural Environment in Magazines**

The image of a mother was characteristically alone in both product ads. There was no husband, no male figure, and no siblings or other children. Breastfeeding mothers were particularly alone based on their location in the nursery or bedroom. Prior research associated with breastfeeding beliefs and stereotypes indicating that breastfeeding is something that should not be done in public were reiterated here by breastfeeding advertisements. Antiquated notions of the "private female" and "public male" come to mind. And, just like Virginia Slims cigarettes did in the 1960s, infant formula advertisements freed women from the home, the bedroom, or the nursery.

When there was a male in the ad, he was a breastfeeding male newborn. Infant formula ads pictured a fairly equal number of male/female infants; breastfeeding ads typically pictured a male. While advertisements were strategically general, allowing the consumer to make up her own story, literature suggests that breasts are for the

consumption of males. In this study, breastfeeding advertisements catered to these negative stereotypes more than infant formula advertisers.

The notion of intimacy was important in another variable considering the age of the breastfeeding child pictured in ads. According to the frequencies in breastfeeding advertisements, the most frequent age of a child in the act of breastfeeding, was an infant or newborn. The AAP recommends children breastfeed for up to one year in age, a time when most children are typically walking. However, breastfeeding advertisements reinforced the notion that breastfeeding is only for clinched-fisted newborns and that it is odd, uncommon, or unacceptable (by lack of visibility) for a mother to breastfeed a child that can sit, crawl, or walk.

Another surprising finding was that the women of breastfeeding ads were equally married or not married, based on the presence of a wedding ring. This could be a reiteration of standing research in which breastfeeding mothers were characterized as radicals, “greenies,” or feminists. Whereas the bottlefeeding mother was more traditional, more conservative, more in line with the Western view of the man-woman-child family unit and white picket-fence mentality about public behavior.

And, while half of both breastfeeding and infant formula ads illustrated women in either professional/casual clothing and environments, there were significant differences in other physical attributes. A surprising conclusion was that the infant formula advertisements illustrated a higher percentage of African Americans and Asians than did the breastfeeding advertisements. While ethnic mothers were pictured in infant formula product ads, it may also be that corporate advertisers were capitalizing on what Hausman (2000) noted as a historical suspicion about the mothering practices of non-Whites (p.



286). This may be an attempt to lure promising new markets to the industry by reminding ethnic consumers that there are other options to the historical thought that breastfeeding is an ethnic thing, something done by minorities or immigrants from foreign countries. It is yet another way to emancipate or Westernize by product, in this case infant formula.

These differences taken together created a “composite” of the breastfeeding mother: she may or may not be married, she is sexual, wearing either a nightgown or lingerie with lots of skin showing, and she is white or Latino.

The appeal advertisers used to sell their products was as interesting as the composites drawn from their depictions of females in the ad. Infant formula advertisers tended to use the rational or Marshallian type of appeal more than any other.

Breastfeeding advertisers stuck to the Routine or Pavlovian appeal most frequently. It is an interesting parallel that breastfeeding advertisers used an appeal type that is associated with intuitive, instinctual and conditioned response while infant formula advertisers chose the selling point of ration, logic, and modern, Western thought. It was a recurring contrast between the wild, seductive, breastfeeding woman governed by senses and the tamed, contained, bottlefeeding mother governed by reason.

Both corporate advertisers used purchasing power based on the frequency of full page spread purchases. Infant formula advertisers, however, chose to locate those ads in the more expensive sections of the magazine such as the front and back cover, and first five pages. It should also be noted that there were peaks in infant formula advertising in July and October and a huge peak in breastfeeding articles for the month of April.

According to the CDC, birth rates spiked in August and September—the months before

and after an unusual spike in infant formula ads (Ventura, Martin, Curtin, Mathews, & CDC, 1998, p. 8).

It was interesting, though, that none of the magazines in the sample had any of the “Babies were born to breastfeed” PSAs. There was no spike in breastfeeding product advertising in August, not to mention there were only seven articles total for all three magazines combined for the month of August, which is National Breastfeeding Awareness Month.

Considering the advertising composite drawn above, the data drawn from analysis of the breastfeeding-related articles brings two variables to the forefront. Rather than take a stance on the bottle/breast political or heated-debate type issues, magazines typically presented readers with articles simply about instruction. The case was presented as “breast: good and bad vs. bottle: good and bad” in a very dry, how-to manner. And, even though the articles were listed as instructional, it is interesting to note that more than half of the articles failed to show a picture or a graphic of a mother in the act of nursing (more than 56 percent to be exact). Only a small minority of articles included words such as “failure,” “quit,” or “too much to handle.” There was no frequent mention of public embarrassment or reference to the words “disgusting,” “convenience,” “bond,” “environmental,” “nature,” or “economy.”

The case of the *ePregnancy* publication is symbolic of the problem of breastfeeding in society. While the magazine “talks” frequently about breastfeeding through its high level of articles, the articles are dry and present only an informational side of the story (and a poor level of instruction at that due to the lack of pictures). The magazine also contains more breastfeeding ads than formula ads; but, as noted above,

those ads tended only to reinforce negative breastfeeding stereotypes. Combining these types of ads and articles is more like a soliloquy than a debate, lacking an opponent and missing a vocabulary to develop a clear message. Breastfeeding gets lip-service. Even in the context of its most pro-breastfeeding source, the topic of breastfeeding still lacks meaningful discussion, is forgotten due to absence of repetitive positive imagery, and sadly, is stigmatized once again by the same stereotypes that contributed to its decline in the first place.

As for the International Code of Marketing of Breast-milk Substitutes, 71.7 percent most frequently advertised brands of Similac, Enfamil, and Nestlé promoted their brand as a breast-milk substitute with a minute percentage indicating their products were for supplementing. In addition to this, an overwhelming number of the infant formula ads pictured an “idealized” use of breast-milk substitutes, with more than 90 percent of the babies laughing, smiling, and content. And, more than 68 percent of the infant formula ads compared synthetic formula to breast-milk. Some advertisers even included the word breast in their ads a total of nine times (so consumers themselves could make the comparison).

Infant formula ads contained small print or cited research more frequently than did breastfeeding advertisements, a trend that catered to negative stereotypes garnered from standing research that infant feeding is something that requires strict, professional medical attention and supervision. Infant formula companies referred consumers to phone numbers (69.3 percent) or mailing/website addresses (95.3 percent). Although only 18 percent of the infant formula ads directly referred the reader to a mail-in rebate or free gift offer, the Web sites and phone numbers promptly collected the contact information

necessary to deliver plenty of bottles, baby bags, coupons, and samples to pregnant consumers—a lucrative use of direct-to-consumer marketing dollars by savvy pharmaceutical advertisers.

Breastfeeding is a pressing social issue in terms of women's equality, preventative healthcare, and the preservation of a valuable natural resource. Future progress in breastfeeding advocacy will depend on an accurate investigation into the current situation. This study will shed light on one facet of that environment.

There were several areas for improvement in this study, such as obtaining a larger sample size or reviewing the same information over a random sample covering several years. This preliminary data could illuminate additional areas of research or expand interest in the topic of breastfeeding. Future studies could consider evaluating the trend in the baby publishing industry to focus on Hispanic themed magazines distributed through doctors' offices or hospital sampling such as *Ser Padres, Espera, Primeros 12 Meses* (*Ser Padres*, Parents Web site, 2004; see also Kerwin, 1999, p. 16; Webster, 2000, p. 30).

Another useful study could mimic the *Parents* study by detecting cultural changes of breastfeeding attitudes via article content over a decade in several other, newer and less-traditional publications. An extension of this study would be to replicate the sample and procedure yet involve different coders from primarily African American, Hispanic, and Asian ethnicities. Another interesting component for further investigation would be a collection of all the research cited in the advertisements and the funding links or donors behind that research.

The female role within the infant feeding product advertisement was treated differently in infant formula product advertisements than breastfeeding product

advertisements. What is surprising about the results, however, is that it was the breastfeeding product advertisers not the infant formula product advertisers that perpetrated negative stereotypes, patriarchal myth, and antiquated notions of feminism. This was somewhat of an anomaly to standing research that discredits magazines with catering to their advertisers. It could be a glitch to accepted theories because of the intimate nature of the topic as well as the overall contradictions in breastfeeding dialogue all together. It is an interesting glitch, though, and one that could be investigated on a more detailed and larger scale.

While the breastfeeding product advertisers have been indicted with stereotypical representation of women in their ads, the infant formula advertisers were not innocents either. They consistently, directly, and arrogantly violated provisions of the International Code of Marketing of Breast-milk Substitutes. Taken together it is no wonder why extended breastfeeding is on the decline and synthetic infant formula continues to thrive as a growing, multi-billion dollar global industry.

### **Wardrobe Malfunction**

This study shed light on theories of magazines catering to advertisers and the conflicting nature of women's roles as mothers in the idealized world presented to consumers by advertising. In this study, the media evolved away from negative stereotypes about breastfeeding being primitive, disgusting, cow-like, or an excretory function. This could indicate that we as a society have made some progress overcoming stigma associated with breastfeeding.

However, there were plenty of visuals that continue the long-standing tradition of negative breastfeeding stereotypes as was there a lack of imagery depicting the act of

breastfeeding in public. And, while I am not suggesting that breasts be exposed for the sake of breasts (or football games), I am advocating that breasts be bared for the sake of babies. The absence of breastfeeding in public is the real wardrobe malfunction. Until society views the act of a woman breastfeeding in public as many times as Mrs. Jackson's TiVo incident, it will remain something done only behind closed doors, half naked with a preemie. If it remains in the bedroom or in the nursery, extended breastfeeding rates will continue to decline and infant health, nutrition, the global environment, and the world economy will suffer.

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**APPENDIX A**  
**INFANT FORMULA ADVERTISEMENTS**  
**CODING MANUAL**

<b>Variable Number</b>	<b>Description &amp; Definitions</b>	<b>Answer Choices</b>
<b>1</b>	Magazine Name <i>Name of Magazine in which ad appears</i>	1. Parenting 2. American Baby 3. ePregnancy
<b>2</b>	Magazine Month <i>Month(s) that magazine was published in which ad appears</i>	1. January 2. February 3. March 4. April 5. May 6. June 7. July 8. August 9. September 10. October 11. November 12. December 13. Combined Months (Nov/Dec) 14. Combined Months (Dec/Jan)
<b>3</b>	Magazine Year <i>Year of Publication for magazine in which ad appears</i>	1. 2003 2. 2004 3. 2005 4. Combined Years 2003/2004 5. Combined Years 2004/2005
<b>4</b>	Page <i>Actual Page Number of Ad</i>	



<b>5</b>	Size  <i>Amount of space the ad takes up in magazine</i>	1. Two-page 2. One whole page 3. Half page 4. Column Length 5. Other/Smaller than column
<b>6</b>	Brand  <i>Product being advertised</i>	1. Similac 2. Enfamil 3. Nestle 4. Soybee 5. Carnation Good Start 6. Other
<b>7</b>	Ad Type  <i>Defining product as either a substitute or supplement (or ambiguous)</i>	1. Breast-milk Substitute: replaces breast milk 2. Supplement: in addition to breastfeeding 3. Supplement: in addition to toddler food 4. Ambiguous 5. Cannot Determine type of product
<b>8</b>	Ad Color	1. Black and White only 2. Balck and white with little color 3. Photographic/Real Color 4. Other: Graphic Design/Cartoon
<b>9</b>	Small Print  <i>Does the Ad contain print that is so small one must pay close attention or change vision range to read it?</i>	1. Yes 2. No
<b>10</b>	Research Cited  <i>Does the ad cite research or reference any particular studies, papers, conference proceedings?</i>	1. Yes 2. No

<b>11</b>	<p>Mail-in</p> <p><i>Does the ad ask for the reader to return a card in order to receive a rebate, coupons, or other marketing premiums “free stuff”?</i></p>	<p>1. Yes</p> <p>2. No</p>
<b>12</b>	<p>Website</p> <p><i>http:// or www. Anything?</i></p>	<p>1. Yes</p> <p>2. No</p>
<b>13</b>	<p>Telephone Number?</p>	<p>1. Yes</p> <p>2. No</p>
<b>14</b>	<p>Breast References</p> <p><i>Number of times the following word combinations and variant spellings are referenced (please tally all that apply):</i></p> <ul style="list-style-type: none"> <li> <i>Breast-feeding/breastfeeding, Breast</i></li> <li> <i>Breast-milk, breastmilk, Mother’s milk</i></li> <li> <i>Mother Nature</i></li> <li> <i>Human Milk</i></li> </ul>	
<b>15</b>	<p>Environment</p> <ol style="list-style-type: none"> <li>1. Patient Gown, Nurse, visible health staff in background</li> <li>2. Kitchen, living room, dining area, feeding/high chair</li> <li>3. Cradle, rocking chair, toys visible</li> <li>4. Mother lying on adult bed, sheets, comforter, etc.</li> <li>5. Trees, garden, zoo,</li> <li>6. Restaurant or grocery store</li> <li>7. Desk/Telephone computer, suit-clad (could include home office)</li> </ol>	<ol style="list-style-type: none"> <li>1. Hospital/Doctors’ Office</li> <li>2. Home Living Area</li> <li>3. Home Baby’s Room/Nursery</li> <li>4. Home Bedroom</li> <li>5. Outside, Nature</li> <li>6. Outside, Casual</li> <li>7. Outside, Professional</li> <li>8. Cannot determine environment</li> </ol>

<b>16</b>	Father  Is there a father or male figure pictured in the ad?	1. Yes 2. No
<b>17</b>	Siblings/Other Children  Are there other children pictured in the ad?	1. Yes 2. No
<b>18</b>	Breastfeeding Mother  <i>Is there an image of a mother breastfeeding in the ad (or appear to be breastfeeding?)?</i>	1. Yes 2. No
<b>19</b>	Bottlefeeding Mother  <i>Is there a mother/female pictured in the ad giving a baby any type of bottle?</i>	1. Yes 2. No
<b>20</b>	Ethnicity  <i>Per your best estimate, what is the ethnicity of the mother/female pictured in ad?</i>	1. White 2. African American 3. Latino/Hispanic 4. Asian 5. Other 6. Cannot determine Ethnicity 7. No mother pictured
<b>21</b>	Skin Showing  1. Open bath robe, neck and part of shoulders revealed, lingerie 2. button up shirt with part of chest area showing 3. T-shirt, turtleneck, buttoned blouse..	1. Lots of skin showing  2. Minimal skin showing  3. No unusual skin showing 4. Cannot determine 5. No Mother pictured

<b>22</b>	Garments  1. Pajamas (non-sexy) 2. Terrycloth, towel, velvet 3. naked 4. Lacey/satin material 5. Business suit, blouse 6. muscle shirt, t-shirt, blue jeans	1. Nightgown 2. Robe 3. Nude 4. Lingerie 5. Working/professional attire 6. Casual clothes 7. Cannot determine clothing 8. No mother pictured
<b>23</b>	Garment Color	1. White 2. Black 3. Colored 4. No mother pictured
<b>24</b>	Hair Length  1. Short to Medium = No longer than shoulders 2. Long = Anything below shoulders	1. Short to Medium 2. Long 3. Cannot determine 4. No mother pictured
<b>25</b>	Hair Type	1. Curly/Wavy 2. Straight 3. Cannot determine 4. No mother pictured
<b>26</b>	Hair Style  1. Pulled Back, something equivalent to interviewing 2. Hair that looks like a Harlequin Romance Novel, flowing, loose, blowing in the wind...	1. Business Professional/Casual 2. Romantic and Wispy 3. Cannot determine 4. No mother pictured in ad
<b>27</b>	Wedding Ring	1. Yes 2. No 3. Cannot determine wedding ring 4. No Model in Ad

<b>28</b>	<p>Celebrity</p> <p><i>Household name like Brooke Shields, Kelly Rippa, Madonna</i></p>	<p>1. Yes</p> <p>2. No</p> <p>3. No Model in Ad</p>
<b>29</b>	<p>Human Child</p> <p>Is there a child pictured in the ad (no cartoons or sketches)</p>	<p>1. Yes</p> <p>2. No</p>
<b>30</b>	<p>Age of Child</p> <p><i>Based on developmental milestones rather than months; base this on how the child is portrayed in the ad rather than your opinion of his/her age</i></p>	<p>1. Newborn (swaddled, eyes closed, fists clinched, hospital gown)</p> <p>2. Sitting upright</p> <p>3. Crawling</p> <p>4. Walking</p> <p>5. Cannot determine age of child</p> <p>6. No child pictured</p>
<b>31</b>	<p>Gender of Child</p> <p>1. Male (typically wearing traditional blue or with sports toys such as footballs)</p> <p>2. Female = pink, pastel-colored clothing, ribbons, bows,</p>	<p>1. Male</p> <p>2. Female</p> <p>3. Can't determine gender of child</p> <p>4. No child pictured</p>
<b>32</b>	<p>Non-human Sketch/Cartoon</p> <p><i>Any type of sketch/graphic that depicts anything other than human (robot, animal, dinosaur, teddy bear)</i></p>	<p>1. Yes</p> <p>2. No</p>
<b>33</b>	<p>Demeanor</p> <p><i>Is the image of the child (human or non-human) that of happiness, sadness, alert, etc.</i></p>	<p>1. Sleeping/eyes closed</p> <p>2. Content/Happy/laughing</p> <p>3. Fussy/Crying</p> <p>4. Other?</p> <p>5. Cannot determine demeanor of child/cartoon</p> <p>6. None pictured</p>

<b>34</b>	<p>Intimacy</p> <p><i>Are there people in the ad that are hugging, kissing, wrestling? Are they touching, dancing, holding hands?</i></p>	<p>1. Yes 2. No</p>
<b>35</b>	<p>Type of Appeal</p> <p><i>For a detailed description of these appeals, please refer to attached sheet.</i></p> <p>1. X Pizza, pizza for the true pizza-lover 2. X Pizza pleases family and friends 3. Savor the rich blend of cheese and tomatoes in each X Pizza 4. Every Friday night: X Pizza! 5. When there's nothing left to fix for dinner, order X pizza 6. X Pizza, a low-cost, nutritional, healthy dinner</p>	<p>1. Ego Appeal 2. Social Appeal 3. Sensory Appeal 4. Routine Appeal 5. Acute Needs Appeal 6. Ration Appeal 7. Cannot determine type of appeal</p>
<b>36</b>	<p>Slogan</p> <p>1. Mentions alone, don't be scared, make sure you give her the best  4. Mention of DHA, RHA, lipil and other scientific sounding ingredients  6. when you can't breastfeed</p>	<p>1. We'll be there for you; you're not alone 2. Fixing fussy Babies 3. Sleeping through the night 4. Physiological development/comparison to breastmilk 5. Sharing feedings with Dad/Family 6. The Next best thing 7. Spit-up relief 8. Other 9. Cannot determine theme of ad</p>

**INFANT FORMULA ADVERTISEMENTS CODING MANUAL  
CODING SHEET**

<b>Variable Number</b>	<b>Description</b>	<b>Answer</b>
<b>1</b>	Magazine Name	
<b>2</b>	Mag Month	
<b>3</b>	Mag Year	
<b>4</b>	Page	
<b>5</b>	Size	
<b>6</b>	Brand	
<b>7</b>	Ad Type	
<b>8</b>	Ad Color	
<b>9</b>	Small Print	
<b>10</b>	Research Cited	
<b>11</b>	Mail-in	
<b>12</b>	Website	
<b>13</b>	Tel	
<b>14</b>	Breast References	
<b>15</b>	Environment	
<b>16</b>	Father	
<b>17</b>	Siblings	
<b>18</b>	Breastfeeding Mom	
<b>19</b>	Bottlefeeding Mom	

<b>Variable Number</b>	<b>Description</b>	<b>Answer</b>
<b>20</b>	Ethnicity	
<b>21</b>	Skin Showing	
<b>22</b>	Garments	
<b>23</b>	Garment Color	
<b>24</b>	Hair Length	
<b>25</b>	Hair Type	
<b>26</b>	Hair Style	
<b>27</b>	Wedding Ring	
<b>28</b>	Celebrity	
<b>29</b>	Human Child	
<b>30</b>	Age of Child	
<b>31</b>	Gender of Child	
<b>32</b>	Non-human Sketch	
<b>33</b>	Demeanor	
<b>34</b>	Intimacy	
<b>35</b>	Appeal Type	
<b>36</b>	Slogan	





**APPENDIX B**  
**BREASTFEEDING PRODUCT ADVERTISEMENTS**  
**CODING MANUAL**

<b>Variable Number</b>	<b>Description &amp; Definitions</b>	<b>Answer Choices</b>
<b>1</b>	Magazine Name <i>Name of Magazine in which ad appears</i>	1. Parenting 2. American Baby 3. ePregnancy
<b>2</b>	Magazine Month <i>Month(s) that magazine was published in which ad appears</i>	1. January 2. February 3. March 4. April 5. May 6. June 7. July 8. August 9. September 10. October 11. November 12. December 13. Combined Months (Nov/Dec) 14. Combined Months (Dec/Jan)
<b>3</b>	Magazine Year <i>Year of Publication for magazine in which ad appears</i>	1. 2003 2. 2004 3. 2005 4. Combined Years 2003/2004 5. Combined Years 2004/2005
<b>4</b>	Page <i>Actual Page Number of Ad</i>	



<b>5</b>	<p>Size</p> <p><i>Amount of space the ad takes up in magazine</i></p>	<ol style="list-style-type: none"> <li>1. Two-page</li> <li>2. One whole page</li> <li>3. Half page</li> <li>4. Column Length</li> <li>5. Other/Smaller than column</li> </ol>
<b>6</b>	<p>Brand</p> <p><i>Product being advertised</i></p>	<ol style="list-style-type: none"> <li>1. Medela</li> <li>2. Avent</li> <li>3. Gerber</li> <li>4. Boppy</li> <li>5. Motherhood</li> <li>6. MiMi Maternity</li> <li>7. Glamourmom</li> <li>8. Bravado</li> <li>9. Other</li> </ol>
<b>7</b>	<p>Product Description</p> <p><i>Defining product based on:</i></p> <ol style="list-style-type: none"> <li>1. Nursing bras, nightgowns, shirts.</li> <li>3. freezer bags, plastic disposable containers</li> <li>4. Boppy pillow for back, pads for leakage</li> <li>5. Bottle/Nipples have their own category</li> <li>6. If item does not fit into any of above?</li> </ol>	<ol style="list-style-type: none"> <li>1. Clothing/Apparel</li> <li>2. Manual/Automatic breast pump</li> <li>3. Storage containers</li> <li>4. Support</li> <li>5. Bottles/Nipples</li> <li>6. Other</li> </ol>
<b>8</b>	<p>Bottles/Nipples</p> <p><i>Analyze the ad and decide what the main use of the bottle or nipple would be</i></p>	<ol style="list-style-type: none"> <li>1. Breast-feeding, explicitly mentions for storing “breastmilk: or “nursing mom’s friend, etc.</li> <li>2. Bottlefeeding, explicitly mentions infant formula</li> <li>3. Non-description, cannot determine, ambiguous or vague enough to be interpreted as breast/bottle product</li> <li>4. Not bottle/nipple ad</li> </ol>

<b>9</b>	Ad Color	1. Black and White only 2. Balck and white with little color 3. Photographic/Real Color 4. Other: Graphic Design/Cartoon
<b>10</b>	Small Print  <i>Does the Ad contain print that is so small one must pay close attention or change vision range to read it?</i>	1. Yes 2. No
<b>11</b>	Research Cited  <i>Does the ad cite research or reference any particular studies, papers, conference proceedings?</i>	1. Yes 2. No
<b>12</b>	Mail-in  <i>Does the ad ask for the reader to return a card in order to receive a rebate, coupons, or other marketing premiums “free stuff”?</i>	1. Yes 2. No
<b>13</b>	Website  <i>http:// or www. Anything?</i>	1. Yes 2. No
<b>14</b>	Telephone Number?	1. Yes 2. No

<b>15</b>	<p>Breast References</p> <p><i>Number of times the following word combinations and variant spellings are referenced (please tally all that apply):</i></p> <ul style="list-style-type: none"> <li> Breast-feeding/breastfeeding, Breast</li> <li> Breast-milk, breastmilk, Mother's milk</li> <li> Human Milk</li> <li> Mother Nature</li> </ul>	
<b>16</b>	<p>Environment</p> <ol style="list-style-type: none"> <li>1. Patient Gown, Nurse, visible health staff in background</li> <li>2. Kitchen, living room, dining area, feeding/high chair</li> <li>3. Cradle, rocking chair, toys visible</li> <li>4. Mother lying on adult bed, sheets, comforter, etc.</li> <li>5. Trees, garden, zoo,</li> <li>6. Restaurant or grocery store</li> <li>7. Desk/Telephone computer, suit-clad (could include home office)</li> </ol>	<ol style="list-style-type: none"> <li>1. Hospital/Doctors' Office</li> <li>2. Home Living Area</li> <li>3. Home Baby's Room/Nursery</li> <li>4. Home Bedroom</li> <li>5. Outside, Nature</li> <li>6. Outside, Casual</li> <li>7. Outside, Professional</li> <li>8. Cannot determine environment</li> </ol>
<b>17</b>	<p>Father</p> <p>Is there a father or male figure pictured in the ad?</p>	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>
<b>18</b>	<p>Siblings/Other Children</p> <p>Are there other children pictured in the ad?</p>	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>
<b>19</b>	<p>Breastfeeding Mother</p> <p><i>Is there an image of a mother breastfeeding in the ad (or appear to be breastfeeding)?</i></p>	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>

<b>20</b>	<p>Real or Symbolized</p> <p><i>Is the breastfeeding mother a real picture of a woman in the act of breastfeeding or is it symbolized through cartoon/drawing?</i></p>	<p>1. Real-life photograph-like</p> <p>2. Cartoon , logo, sketch, or graphic image</p> <p>3. No breastfeeding image (real or sketch) pictured</p>
<b>21</b>	<p>Bottlefeeding Mother</p> <p><i>Is there a mother/female pictured in the ad giving a baby any type of bottle?</i></p>	<p>1. Yes</p> <p>2. No</p>
<b>22</b>	<p>Ethnicity</p> <p><i>Per your best estimate, what is the ethnicity of the mother/female pictured in ad?</i></p>	<p>1. White</p> <p>2. African American</p> <p>3. Latino/Hispanic</p> <p>4. Asian</p> <p>5. Other</p> <p>6. Cannot determine Ethnicity</p> <p>7. No mother pictured</p>
<b>23</b>	<p>Skin Showing</p> <p>1. Open bath robe, neck and part of shoulders revealed, lingerie</p> <p>2. button up shirt with part of chest area showing</p> <p>3. T-shirt, turtleneck, buttoned blouse..</p>	<p>1. Lots of skin showing</p> <p>2. Minimal skin showing</p> <p>3. No unusual skin showing</p> <p>4. Cannot determine</p> <p>5. No Mother pictured</p>
<b>24</b>	<p>Garments</p> <p>1. Pajamas (non-sexy)</p> <p>2. Terrycloth, towel, velvet</p> <p>3. naked</p> <p>4. Lacey/satin material</p> <p>5. Business suit, blouse</p> <p>6. muscle shirt, t-shirt, blue jeans</p>	<p>1. Nightgown</p> <p>2. Robe</p> <p>3. Nude</p> <p>4. Lingerie</p> <p>5. Working/professional attire</p> <p>6. Casual clothes</p> <p>7. Cannot determine clothing</p> <p>8. No mother pictured</p>

<b>25</b>	Garment Color	1. White 2. Black 3. Colored 4. No mother pictured
<b>26</b>	Hair Length  1. Short to Medium = No longer than shoulders 2. Long = Anything below shoulders	1. Short to Medium 2. Long 3. Cannot determine 4. No mother pictured
<b>27</b>	Hair Type	1. Curly/Wavy 2. Straight 3. Cannot determine 4. No mother pictured
<b>28</b>	Hair Style  1. Pulled Back, something equivalent to interviewing 2. Hair that looks like a Harlequin Romance Novel, flowing, loose, blowing in the wind...	1. Business Professional/Casual 2. Romantic and Wispy 3. Cannot determine 4. No mother pictured in ad
<b>29</b>	Wedding Ring	1. Yes 2. No 3. Cannot determine if wearing wedding ring 4. No Model in Ad
<b>30</b>	Celebrity  <i>Household name like Brooke Shields, Kelly Rippa, Madonna</i>	1. Yes 2. No 3. No Model in Ad
<b>31</b>	Human Child  Is there a child pictured in the ad (no cartoons or sketches)	1. Yes 2. No

<b>32</b>	<p>Age of Child</p> <p><i>Based on developmental milestones rather than months; base this on how the child is portrayed in the ad rather than your opinion of his/her age</i></p>	<ol style="list-style-type: none"> <li>1. Newborn (swaddled, eyes closed, fists clinched, hospital gown)</li> <li>2. Sitting upright</li> <li>3. Crawling</li> <li>4. Walking</li> <li>5. Cannot determine age of child</li> <li>6. No child pictured</li> </ol>
<b>33</b>	<p>Gender of Child</p> <ol style="list-style-type: none"> <li>1. Male (typically wearing traditional blue/sports/football toys)</li> <li>2. Female – pink, ribbons</li> </ol>	<ol style="list-style-type: none"> <li>1. Male</li> <li>2. Female</li> <li>3. Can't determine gender of child</li> <li>4. No child pictured</li> </ol>
<b>34</b>	<p>Non-human Sketch/Cartoon</p> <p><i>Any type of sketch/graphic that depicts anything other than human: (robot, animal, dinosaur, teddy bear)</i></p>	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>
<b>35</b>	<p>Demeanor</p> <p><i>Is the image of the child (human or non-human) that of happiness, sadness, alert, etc.</i></p>	<ol style="list-style-type: none"> <li>1. Sleeping/eyes closed</li> <li>2. Content/Happy/laughing</li> <li>3. Fussy/Crying</li> <li>4. Other?</li> <li>5. Cannot determine demeanor of child/cartoon</li> <li>6. None pictured</li> </ol>
<b>36</b>	<p>Intimacy</p> <p><i>Are there people in the ad that are hugging, kissing, wrestling? Touching, holding hands, dancing, rubbing noses...basically any physical contact</i></p>	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>

<b>37</b>	<p>Type of Appeal</p> <p><i>For a detailed description of these appeals, please refer to attached sheet.</i></p> <ol style="list-style-type: none"> <li>1. X Pizza, pizza for the true pizza-lover</li> <li>2. X Pizza pleases family and friends</li> <li>3. Savor the rich blend of cheese and tomatoes in each X Pizza</li> <li>4. Every Friday night: X Pizza!</li> <li>5. When there's nothing left to fix for dinner, order X pizza</li> <li>6. X Pizza, a low-cost, nutritional, healthy dinner</li> </ol>	<ol style="list-style-type: none"> <li>1. Ego Appeal</li> <li>2. Social Appeal</li> <li>3. Sensory Appeal</li> <li>4. Routine Appeal</li> <li>5. Acute Needs Appeal</li> <li>6. Ration Appeal</li> <li>7. Cannot determine type of appeal</li> </ol>
<b>38</b>	<p>Slogan</p>	<ol style="list-style-type: none"> <li>1. We'll be there for you; you're not alone</li> <li>2. Fixing fussy Babies</li> <li>3. Sleeping through the night</li> <li>4. Best for Baby's physiological development</li> <li>5. Time Savings</li> <li>6. Money Savings</li> <li>7. Environmentally Friendly</li> <li>8. Other</li> <li>9. Cannot determine theme of ad</li> </ol>

**BREASTFEEDING PRODUCT ADVERTISEMENTS CODING MANUAL  
CODING SHEET**

<b>Variable Number</b>	<b>Description</b>	<b>Answer</b>
<b>1</b>	Magazine Name	
<b>2</b>	Mag Month	
<b>3</b>	Mag Year	
<b>4</b>	Page	
<b>5</b>	Size	
<b>6</b>	Brand	
<b>7</b>	Product Description	
<b>8</b>	Bottle/Nipples	
<b>9</b>	Ad Color	
<b>10</b>	Small Print	
<b>11</b>	Research Cited	
<b>12</b>	Mail-in Gift or Rebate	
<b>13</b>	Website	
<b>14</b>	Telephone	
<b>15</b>	Breast References	
<b>16</b>	Environment	
<b>17</b>	Father	
<b>18</b>	Siblings	
<b>19</b>	Breastfeeding Mother	





<b>Variable Number</b>	<b>Description</b>	<b>Answer</b>
<b>20</b>	Real or Symbolized	
<b>21</b>	Bottlefeeding Mother	
<b>22</b>	Ethnicity	
<b>23</b>	Skin Showing	
<b>24</b>	Garments	
<b>25</b>	Garment Color	
<b>26</b>	Hair Length	
<b>27</b>	Hair Type	
<b>28</b>	Hair Style	
<b>29</b>	Wedding Ring	
<b>30</b>	Celebrity	
<b>31</b>	Human Child	
<b>32</b>	Age Child	
<b>33</b>	Gender Child	
<b>34</b>	Non-human Child Sketch	
<b>35</b>	Demeanor	
<b>36</b>	Intimacy	
<b>37</b>	Appeal Type	
<b>38</b>	Slogan	



**APPENDIX C**  
**BREASTFEEDING ARTICLES**  
**CODING MANUAL**

<b>Variable Number</b>	<b>Description &amp; Definitions</b>	<b>Answer Choices</b>
<b>1</b>	Magazine Name <i>Name of Magazine in which article appears</i>	1. Parenting 2. American Baby 3. ePregnancy
<b>2</b>	Magazine Month <i>Month(s) that magazine was published in which article appears</i>	1. January 2. February 3. March 4. April 5. May 6. June 7. July 8. August 9. September 10. October 11. November 12. December 13. Combined Months (Nov/Dec) 14. Combined Months (Dec/Jan)
<b>3</b>	Magazine Year <i>Year of Publication for magazine in which article appears</i>	1. 2003 2. 2004 3. 2005 4. Combined Years 2003/2004 5. Combined Years 2004/2005
<b>4</b>	Page <i>Actual Page Number of First page of article</i>	
<b>5</b>	Total Pages <i>Amount of space the article takes up in magazine</i>	

<b>6</b>	<p>Pagination</p> <p><i>How article is distributed throughout magazine</i></p>	<ol style="list-style-type: none"> <li>1. One Page</li> <li>2. Multi-page, continuous</li> <li>3. Multi-page, separated</li> </ol>
<b>7</b>	<p>Article Type</p> <p><i>Defining article based on:</i></p> <ol style="list-style-type: none"> <li>1. Traditional story = feature story, article, etc.</li> <li>2. News Brief = One/Two columns, very brief usually no documented author</li> <li>3. Editorial = written by magazine staff</li> <li>4. Letter to Editor = written by external individual</li> <li>5. Advice columns appear regularly and usually involve questions with answers or advice</li> </ol>	<ol style="list-style-type: none"> <li>1. Traditional Story</li> <li>2. News Brief</li> <li>3. Editorial</li> <li>4. Letter to the Editor</li> <li>5. Advice Column</li> </ol>
<b>8</b>	<p>Theme of Article</p> <p><i>Overall, large scheme of article what the main focus is</i></p> <ol style="list-style-type: none"> <li>1. Medical: nutritional value of breast-milk, disease prevention, IQ levels, figure retention</li> <li>2. Political: Milk-ins, breast-feeding awareness week</li> <li>3. Legal: public decency laws, breastfeeding arrestees, fines</li> <li>4. Instructional (how to, latching on techniques, storage regulations)</li> <li>5. Problem-oriented (sore cracked nipples, milk supply decrease, engorgement, difficulty pumping)</li> <li>6. Solution-oriented (facilitation methods for pumping, storing solutions)</li> <li>7. Weaning and Supplementing: How to get your child to stop nursing, when is it okay to</li> </ol>	<ol style="list-style-type: none"> <li>1. Medical</li> <li>2. Political</li> <li>3. Legal</li> <li>4. Instructional</li> <li>5. Problem-oriented</li> <li>6. Solution-oriented</li> <li>7. Weaning and Supplementing</li> <li>8. Decision-oriented</li> <li>9. Cannot determine theme of article</li> </ol>

	supplement, 8. Decision-oriented (presents both breast and infant formula information indicating it is up to the reader to decide what is best for them	
<b>9</b>	Images	1. Images of breastfeeding only 2. Images of bottlefeeding only 3. Combination of both breastfeeding and bottlefeeding images 4. No images at all that relate to breast or bottlefeeding
<b>10</b>	Website  <i>http:// or www. Anything?</i>	1. Yes 2. No
<b>11</b>	Telephone Number?	1. Yes 2. No
<b>12</b>	Failure Words  <i>Does the article mention words that indicate failure, such as the following words:</i>  <i>Failure</i>  <i>Attempt</i>  <i>held-on or gave up</i>  <i>guilt</i>	1. Yes 2. No
<b>13</b>	Problems  <i>Does article refer to potential problems with breastfeeding, such as difficulty pumping at work, time consuming, painful</i>	1. Yes 2. No

<b>14</b>	<p>Public</p> <p><i>Does article mention embarrassment, words “whipping it out” or other indications that breastfeeding does not belong anywhere in public (hiding places, onlookers, etc., breasts leaking in public through blouse)</i></p>	<p>1. Yes 2. No</p>
<b>15</b>	<p>Disgusting</p> <p><i>Does the article compare anything to milking cow, bodily fluid, that breastfeeding should be done in restroom with other excretions, etc.</i></p>	<p>1. Yes 2. No</p>
<b>16</b>	<p>Pain</p> <p><i>Does the article mention cracked nipples, mastitis, plugged ducts, engorgement or other painful sounding side-effects</i></p>	<p>1. Yes 2. No</p>
<b>17</b>	<p>Emotional</p> <p><i>Does the article mention upsetting moments, frustration, crying, competition with other mothers, feelings of guilt for not breastfeeding or for weaning early</i></p>	<p>1. Yes 2. No</p>
<b>18</b>	<p>Bond</p> <p><i>Does the article mention the special bond between breastfeeding mothers and their children</i></p>	<p>1. Yes 2. No</p>

<b>19</b>	<p>Convenience</p> <p>Does the article mention the convenience factor of breastfeeding such as not having to fix/wash/prepare bottles</p>	<p>1. Yes 2. No</p>
<b>20</b>	<p>Environmental</p> <p><i>Does the article mention the toll of infant formula manufacturing on environment and that breastfeeding is more environmentally friendly</i></p>	<p>1. Yes 2. No</p>
<b>21</b>	<p>Nature</p> <p><i>Does the article refer in some way to a return to nature by breastfeeding, does it mention evolution or that women/animals have been doing it for years</i></p>	<p>1. Yes 2. No</p>
<b>22</b>	<p>Economy</p> <p>Does the article mention the financial savings of breastfeeding as compared to purchasing formula</p>	<p>1. Yes 2. No</p>
<b>23</b>	<p>Location of Advertisements Next to Article</p>	<p>1. Advertisement for breastfeeding related product within five (5) pages 2. Advertisement for bottlefeeding related product within five (5) pages 3. Advertisement for Both breast/bottlefeeding related products within five (5) pages of article 4. No related advertisements (breastfeeding or bottlefeeding) within five (5) pages of article</p>

## BREASTFEEDING ARTICLES CODING MANUAL CODING SHEET

Variable Number	Description	Answer
1	Magazine Name	
2	Mag Month	
3	Mag Year	
4	Page	
5	Total Pages	
6	Pagination	
7	Article Type	
8	Theme of Article	
9	Images	
10	Website	
11	Telephone	
12	Failure Words	
13	Problems	
14	Public	
15	Disgusting	
16	Pain	
17	Emotional	
18	Bond	
19	Convenience	
20	Environmental	

[illegible]

## APPENDIX D

### TYPE OF APPEAL VARIABLE DEFINITIONS AND EXAMPLES

The following descriptions and examples are based on an article titled, “A six-segment message strategy wheel,” by Ronald E. Taylor (1999, pp. 7-17), found in the *Journal of Advertising Research* Volume 39, Issue 6.

1. **Ego Appeal:** Purchaser/consumer makes a statement to him/herself about him/herself; Vanity, self-actualization (pp. 12, 16)  
*Ex: X pizza, pizza for the true pizza-lover (p. 16)*  
*X formula for the milk connoisseur*  
*X breast pump, for women who know how to pump*
2. **Social Appeal:** Prestige-seeking, making statements to others. Being noticed, gaining social approval, engaging in socially correct behavior (pp.13, 16).  
*Ex: X Pizza pleases family and friends (p. 16)*  
*X formula makes the whole family happy*  
*X Breast pads keep everyone safe from leaks*
3. **Sensory Appeal:** Products provide consumers with “moments of pleasure” based on five senses (taste, sight, hearing, touch, or smell)...use of the product transforms into a pleasurable moment (p. 13).  
*Ex: Savor the rich blend of cheese and tomatoes in each X pizza (p. 16)*  
*Rich, creamy and white X formula tastes oh so good*  
*Soft, silky, and scented like roses, the new X nursing bra*
4. **Routine Appeal:** Response adequately reduces drive. Uses appeals such as convenience ease of use product efficacy especially hyperbole (an untestable claim of superiority based on attribute or benefit also used here ) (pp.13, 16).  
*Ex: Every Friday night: X Pizza! (p. 16)*  
*Every four hours: X formula!*  
*Every time you nurse, X nipple cream*
5. **Acute Need Appeal:** No time too much info to make a choice, usually point of purchase, product distribution, store personnel recommendations...to build brand familiarity “known and trusted” when consumer’s acute need arises! (p.16)  
*Ex: When there’s nothing left to fix for dinner, order X pizza (p. 16)*  
*When you can’t breastfeed, give her the next best thing*  
*When you are on the go, use the fast, triple speed X breast pump*
6. **Ration Appeal:** Rational, conscious, calculating, deliberative consumers  
Greatest utility or value per dollar usually provides detailed product/price/benefit information to aid consumer in economic calculus (pp. 8, 13).  
*Ex: X Pizza, a low-cost, nutritional, healthy (p. 16)*  
*X formula, nutritious and half the cost of leading brands*  
*X breast milk storage bags, sturdy but cheap!*

## **APPENDIX E**

### **INTERNATIONAL CODE OF MARKETING OF BREAST-MILK SUBSTITUTES: ARTICLES RELATED TO CODING VARIABLES**

#### **Article 4. Information and Education**

4.2: Informational and educational materials, whether written, audio, or visual, dealing with the feeding of infants and intended to reach pregnant women and mothers of infants and young children, should include clear information on all the following points: (a) the benefits and superiority of breast-feeding; (b) maternal nutrition, and the preparation for and maintenance of breast-feeding; (c) the negative effect on breast-feeding of introducing partial bottle-feeding; (d) the difficulty of reversing the decision not to breast-feed; (e) where needed, the proper use of infant formula, whether manufactured industrially or home-prepared. When such materials contain information about the use of infant formula, they should include the social and financial implications of its use; the health hazards of inappropriate foods or feeding methods; and, in particular, the health hazards of unnecessary or improper use of infant formula and other breast-milk substitutes. Such materials should not use any pictures or text which may idealize the use of breast-milk substitutes.

#### **Article 5. The general public and mothers**

- 5.1 There should be no advertising or other form of promotion to the general public of products within the scope of this Code.
- 5.2 Manufacturers and distributors should not provide, directly or indirectly, to pregnant women, mothers or members of their families, samples of products within the scope of this Code.
- 5.3 ...There should be no point-of-sale advertising, giving of samples, or any other promotion device to induce sales directly to the consumer at the retail level, such as special displays, discount coupons, premiums, special sales, loss-leaders and tie-in sales, for products within the scope of this Code.
- 5.4 Manufacturers and distributors should not distribute to pregnant women or mothers of infants and young children any gifts of articles or utensils which may promote the use of breast-milk substitutes or bottle-feeding.

#### **Article 7. Health workers**

- 7.2 Information provided by manufacturers and distributors to health professionals regarding products within the scope of this Code should be restricted to scientific and factual matters, and such information should not imply or create a belief that bottle-feeding is equivalent or superior to breast-feeding.



7.4 ...Health workers should not give samples of infant formula to pregnant women, mothers of infants and young children, or members of their families.

## **Article 9. Labeling**

9.1 Labels should be designed to provide the necessary information about the appropriate use of the product, and so as not to discourage breast-feeding.

9.2 Manufacturers and distributors of infant formula should ensure that each container has a clear, conspicuous, and easily readable and understandable message printed on it...which includes all the following points: (a) the words “important Notice” or their equivalent; (b) a statement of the superiority of breast-feeding....Neither the container nor the label should have pictures of infants, nor should they have other pictures or text which may idealize the use of infant formula....The terms “humanized,” “maternalized” or similar terms should not be used.

**\*Note.** Taken from: *International code of marketing of breast-milk substitutes. (1981)*. Geneva: World Health Organization, pp. 16-20.

## **VITA**

The author currently works in external relations in the College of Education at Louisiana State University and hopes to continue research in the area of women's role in society as both mothers and equal contributors to the economy, workforce, and social, political, and cultural structures.