Understanding Women’s Interpretation of Infant Formula Advertising

By

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ABSTRACT

Objective:
This study aims to understand how women interpret infant formula advertising to aid understanding of the inverse association between exposure to infant formula advertising and breastfeeding rates.

Methods:
Four focus groups were divided according to reproductive status: pre-conceptional, pregnant, exclusive breastfeeding and formula-feeders. Facilitators guided a discussion of participant reactions to infant formula marketing materials.

Results:
Participants reported that the advertisements conveyed an expectation of failure with breastfeeding and that formula is a solution to fussiness, spit-up and other normal infant behaviors. Participants reported confusion in terms of how human milk compares to formula. These concerns were exacerbated by awareness of marketing by the healthcare industry.

Conclusion:
Formula marketing decreases mothers’ confidence in breastfeeding, especially when provided by healthcare providers and institutions.
INTRODUCTION

Exclusive breastfeeding for six months and continued breastfeeding to at least one year is recommended by all major health organizations as the optimal way to nourish infants (1). The hazards of not breastfeeding include increased risk of acute ear and respiratory infections, diarrhea, asthma, obesity, Sudden Infant Death Syndrome (SIDS), leukemia, diabetes and necrotizing enterocolitis (NEC) (2). For the mother, exclusive breastfeeding reduces her risk of breast and ovarian cancer (2), myocardial infarction and type II diabetes (3). In addition to the reduced risks of disease, there are immeasurable psychosocial benefits to breastfeeding (4). The US Surgeon General recently issued a Call to Action to Support Breastfeeding, calling upon mothers and families, communities, healthcare workers, employers, researchers and public health professionals to do their parts to improve breastfeeding rates in the nation (5).

Despite the abundance of supportive evidence, breastfeeding rates in the United States continue to lag behind recommendations. Current data show that 74.6% of women in the US initiate breastfeeding, yet only 34% of US infants continue to be breastfed exclusively at 3 months, and just 14% of US infants are breastfed exclusively at six months (5). The reasons for such poor US breastfeeding rates are multifactorial. While intention to breastfeed is closely tied with breastfeeding initiation, we know that many women do not satisfy their breastfeeding goals due to various barriers. These barriers are enumerated clearly in the Surgeon General’s Call to Action and include unsupportive hospital birthing practices (6), unsupportive workplace and childcare policies, poor family and peer support, lack of knowledge and unfavorable social norms (5).

Contributing to these important barriers is the widespread marketing of infant formula. While most women who intend to breastfeed initiate the practice (4), they often begin
supplementing with infant formula or cease breastfeeding altogether well before they intended to, largely due to extensive exposure to human milk substitutes (5). Evidence shows that infant formula advertising is far-reaching and ever-increasing (7). The Government Accountability Office report on formula marketing data trends states that annual expenditures on advertisements grew from $29 million to over $46 million in the US alone between 1999 and 2004 (7). Breastfeeding promotion and education efforts cannot counteract this proliferation as they are not supported by multi-million dollar advertising budgets. This greatly imbalanced presentation of information about infant feeding is affecting women’s caregiving practices.

There are numerous studies that have demonstrated the detrimental effects of providing infant formula advertising to new mothers being discharged from the hospital on breastfeeding rates (8-14). The impact of other types of formula marketing on breastfeeding rates are not known due to lack of research (7), yet expert consensus suggests that there is an inverse relationship between the marketing of infant formula and breastfeeding rates, which was the basis for the drafting of the WHO International Code of Marketing of Breastmilk Substitutes in 1981(15). An unpublished study that was presented at the 2011 International Lactation Consultant Association conference adds evidence to this theory, concluding that exposure to infant formula in the media is associated with lower rates of breastfeeding initiation and exclusivity in the hospital, while exposure to breastfeeding information is associated with higher rates of breastfeeding initiation and exclusivity in the hospital (16). Additional support can be found in a recent mixed-methods study conducted in the Philippines showing that those who could recall an infant formula message were twice as likely to feed their children infant formula (17).
If exposure to infant formula advertising outside of the hospital is indeed associated with lower breastfeeding rates, it follows that this could be due to the role of advertising in shaping false beliefs about the merits of infant formula and/or the adequacy of breastmilk. Lending support to this hypothesis is trend data from HealthStyles, an annual nationally representative survey revealing that in 2010, 21% of the US population surveyed believed that infant formula was as good as breastmilk, up from 14% in 1999 but down from 28% in 2005 (16). Only a quarter of respondents believed that feeding infant formula would increase an infant’s risk of getting sick in those years (16). The 2005 Infant Feeding Practices Survey reveals further evidence of false beliefs about infant feeding in the US. According to their nationally representative sample of prenatal women, 33% did not believe that breastfeeding was the best way to feed an infant (18). Also noteworthy, and echoing the aforementioned HealthStyles data, 28% agreed with the statement, “Infant Formula is as good as breastmilk” (18). Interestingly, other literature shows that some women perceive infant formula to have added “vitamins,” which contributes to their desire to feed formula in addition to their own milk (19). This body of research demonstrating that women’s exposure to infant formula advertising is associated with decreased breastfeeding is fundamental to our study aim, and provides the theoretical basis for this study. Understanding how women perceive the advertisements is crucial to understanding this relationship, and learning more about one of many barriers that keep women from providing their infant the best start on optimal health.
OBJECTIVES

This study aims to increase understanding of how women interpret infant formula advertising to better characterize the nature of the negative correlation between exposure to infant formula marketing and recommended exclusivity and duration of breastfeeding.

METHODS

Theoretical Basis

This study featured elements of Qualitative Descriptive and Grounded Theory traditions. Given the strong data supporting the theory that exposure to infant formula advertising is associated with decreased breastfeeding, the authors used focus groups to create an abstract rendering of the target phenomenon, therein employing a Grounded Theory orientation. Great care was taken to maintain ethnographic fidelity while also speaking to the experience of the larger population of women exposed to this form of advertising. To this end, the authors employed theoretical sampling, progressively focused data collection and deliberate use of coding families to create an integrated explanation of the relationship under study (20, 21).

Study Design and Participants

This study employed four focus groups. Purposeful, theoretical sampling was chosen to stratify participants into four groups, formed on the basis of their reproductive and infant feeding history. This stratification is based on the theory that women’s interpretations of and exposure to infant formula advertising would vary by category. Group 1 (n=10) consisted of nulliparous women who had not yet conceived a child, but who were planning to conceive within the following three years. Group 2 (n=8) consisted of nulliparous pregnant women. Group 3 (n=10) consisted of primiparous or multiparous women less than 3 years postpartum who fed any...
amount of infant formula to their most recent child. Group 4 (n=6) consisted of primiparous or multiparous women less than 3 years postpartum who had exclusively breastfed their most recent child. Sample sizes of the focus groups were chosen to optimize validity and ensured they were large enough to allow thorough case-oriented analysis and meaningful interaction between participants while being small enough to avoid theoretical saturation (informational redundancy).

Participants were recruited from the Raleigh, Durham and Chapel Hill/Carrboro areas of North Carolina (Triangle) during a 4-week period from May 25 to June 25, 2011 using flyers and informational emails encouraging all women of reproductive age to help researchers learn how advertising directed at pregnant women and new moms is interpreted. Flyers and emails were distributed through myriad channels, including daycare centers, baby stores, churches, coffee shops, schools, YMCAs, mother-to-mother support groups, childbirth education classes and University and neighborhood listserves. Upon responding with interest, potential participants were notified of the nature of the particular advertisements to be discussed in the focus groups (infant formula) and screened for eligibility and group assignment. Of the close to 100 interested respondents, 40 indicated they could attend the scheduled date and time of their respective focus group. Six participants cancelled the day of their focus group or did not show.

Three focus groups were held on a Saturday in a conference room at a local library and one focus group took place the following Sunday at a community education center affiliated with an academic medical center in the Southeastern U.S. The facilitation team consisted on one professionally trained facilitator and one graduate student trainee. All sessions met for 90 minutes and utilized the same prepared protocol to guide facilitation. The protocol was developed to move from general to specific concepts and to encourage reflection or present moment thought (and discourage discussions of future and hypothetical). The facilitators probed
for clarification using participants’ words to encourage elaboration, taking care to avoid leading.

No monetary compensation was given to participants, however a small reusable tote bag with WHO Code-Compliant, family-friendly coupons was provided along with refreshments. This research was approved by the Office of Human Research Ethics at the University of North Carolina at Chapel Hill on December 13, 2010 (IRB #10 2198).

*The Advertisements (see Appendix for visual representation)*

All four focus groups were shown the same infant formula marketing materials:

1) Similac hospital “breastfeeding” discharge bag containing ready-to-feed formula bottles, rings and nipples, a cooler bag with ice packs for stored milk, breastmilk storage bottles, and dozens of promotional materials, samples and coupons for Similac and other brand infant products. Special attention was drawn to two inserts: a) “Parent’s Guide to Infant Stools,” an 8.5x11 sheet showing three different color photographs of infant stools: breastfed stools, Similac Advance EarlyShield™ stools and formula-fed stools; and b) “Nutrition for Extraordinary Milestones,” a small pamphlet featuring eight of Similac brand infant formulas.

2) Enfamil hospital “breastfeeding” discharge bag containing one can of powdered formula, a cooler for stored milk, Snappie brand breastmilk storage bottles and dozens of inserts, including promotional materials and coupons for Enfamil and other infant products. Special attention was drawn to two inserts: a) A card introducing Newborn, Infant and Toddler Enfamil Staged Formulas with the tagline, “Individually tailored to meet your baby’s changing needs;” and b) A pamphlet advertising Enfamil home delivery and toll-free number for infant feeding questions with the tagline, “Not Just Products. Answers.”
3) Color image of Similac Advance EarlyShield™ package, a ready-to-feed infant formula 6-pack.

4) An image from an Enfamil web advertisement with the caption, “Feeding issues are tough. Addressing them can be easy.” Below the caption, three different Enfamil formulas are pictured, each one with a text box. The first says, “Quiets colic symptoms* fast, often within 48 hours.” The second says, “Designed for babies with fussiness or gas” and the third reads, “Clinically proven to reduce spit-up by more than 40%**”. Below the text boxes, a banner reads, “For a free formula sample click here”. In small print, the stars are explained, “* Due to cow’s milk protein allergy. ** Based on clinical studies of the same formula before the addition of LIPIL.”

5) A magazine advertisement by Abbott that doesn’t mention its brand, showing only an image of a baby in male hands with the text “You’ll feed his imagination. We’ll help feed his immune system.” The text is shaped within the familiar shield that Similac (an Abbott brand) uses to promote their EarlyShield™ additive.

Data Collection and Analysis

The focus groups were recorded digitally and transcribed verbatim by a professional transcriptionist. The transcriptions were checked for accuracy. Data was then coded using Atlas.ti and manual methods for identifying coding families (by theoretically-based hypothesis and observation of emergent themes). Intercoder reliability was found to be high upon comparing codes with a second data analyst. Quotes were excerpted to illustrate main themes.

RESULTS

Demographic information was collected retrospectively via email survey to increase anonymity given the small sample sizes. The education level of the sample was higher than the
NC and national average; household income level was widely distributed, but was generally skewed to the upper end of the Income Quartiles defined by the US Census; the sample proportions were comparable to the overall NC population proportions of Blacks and Asians, but over-represented Whites and under-represented Latinas. See Table 1.

Table 1. Sample Demographics

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<th>Characteristic</th>
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Exposure to Commercial Infant Formula Promotion vs. Breastfeeding Promotion

Participants were asked to recall any promotional or informational materials about infant formula and/or breastfeeding that they had seen. The discussion was unanimous that infant formula advertising is ubiquitous and virtually impossible not to have seen. Sources of exposure to infant formula advertising were difficult to pinpoint given its ubiquitous nature, but was said to be provided from healthcare clinics, hospitals, found on social media, pregnancy and infant care websites, pregnancy and parenting magazines and direct-to-consumer mailings. In contrast, it was difficult for participants to recall having seen any breastfeeding promotion outside of an infant care or childbirth education class. Sources of exposure to breastfeeding information came from advertisements for breastfeeding accessories, La Leche League advertisements or information, and public health campaigns (billboards, WIC).

The Inferiority/Superiority of Human Milk vs. Commercial Infant Formula

Participants reported that the advertisements inspired doubts about the superiority of human milk over formula. While initially expressing confidence that “breast is best,” after having reviewed the advertisements, participants reported concern that the featured scientific ingredients of infant formula may not be found in human milk.

But it still makes me wonder then, is my breast milk doing all those things too? Like I’m starting to feel a little bit of doubt because this is just…this covers everything. You know? I’m like “Well, actually I don’t know if my breast milk will provide strong bones and brain and eye.” I don’t know. I’m feeling a little bit of doubt when I look at this. [Pregnant group]

I don’t know how much DHA goes through breast milk, and so like it almost makes me feel like, “Wow. That’s something that the formula has that I don’t even know.” Like, “I have to be maybe eating fish or be taking supplements myself in order for that to get through to my baby, probably.” I don’t really know how all that…works. [Pregnant Group]
It’s like “Closer than ever to breast milk and we provide immune support, strong bones, and brain and eye.” … It doesn’t seem clear that breast milk does all that too. [Pregnant Group]

Participants also expressed doubts that their milk would change in response to the changing needs of a growing infant, while the advertisements purport that this is achieved with Staged Formulas.

I was thinking, “Okay. So I wonder if my breast milk changes. The baby’s gonna get the same breast milk all the time but this [formula] is gonna change with my baby.” [Exclusive Breastfeeders’ Group]

With breastfeeding you can’t go and get a Gentle Ease formula or an AR…you know. What you get is what you get and with this [formula] there are different options based on the need that your baby might have. [Pregnant Group]

**Treatment for Feeding-Related Problems**

Participants reported that the advertisements gave them the impression that their milk could not solve common infant problems as well as formula. Respondents frequently noted that the advertisements offer solutions for breastfeeding women that encourage formula use (i.e., if your breastfed baby has this issue, purchase this formula product to fix it), and a few participants understood these ads as offering solutions for those already feeding formula (i.e., switch to the advertised formulas if the detailed feeding issue is encountered). After it was pointed out that the feeding issues mentioned in the some of the advertisements are normal infant behaviors, i.e., colic, gas, fussiness and spit-up, one participant stated:

It also makes you think that … if your baby has one of these issues, it’s due to what they’re eating. And, you know, a fussy baby can be due to many things. You know. Colic can be…it’s not necessarily what the baby’s eating or what you’re eating even, and sometimes they just don’t know. But this makes it seem like “Oh. It’s something that they’re ingesting that’s making them behave like this.” [Pregnant Group]

Participants reported that the advertisements made them think that infant formula was being presented as a way to gain control over the normal stresses of parenthood.
You can’t change your milk but I can change my formula and maybe that will solve my problem… That I probably can go [on] trying until I find one that fits right. Or it’s sort of like, you know, when you’re going down the cold medicine aisle. You’re like “Okay. I’ve got fussiness and spit-up, so which one can I use?” so to speak. [Formula Group]

I think it’s sort of providing you these options of “This is something that formula can do that your breastmilk necessarily can’t do.” [Pregnant Group]

I feel like it does imply that these can be solutions to problems caused by breastfeeding. [Pregnant Group]

Several participants stated that the advertising message that indicated that mothers need to look externally to properly care for their infant was disempowering.

Well, to me, it says that you’re doing something wrong. That feeding issues are tough and addressing them can be easy - Like the solution is easy if you use this. But if you’re not using this and your baby has this issue - this issue, then it’s kind of like your fault because you’re not feeding the right thing. [Preconception Group]

This approach was perceived as formula use being equivalent to a “clinical solution,” especially when advertisements were provided by healthcare providers. This perception was exemplified in statements about the infant formula packaging itself, for example, “[seems] like I’d pick it up in a pharmacy,” “like it’s the magic pill for babies,” “seems very medical” and “looks like a drug box.” One participant stated:

It seems like maybe this is making use of modern science and technology, the best that we have to promote healthy babies. [Preconception Group]

Commercial Infant Formula: Equivalence to Human Milk

Participants reported that the advertisements led them to believe that infant formula is nutritionally equivalent to human milk, and even led one participant to think “it’s powdered breastmilk!” [Formula Group] This type of statement elicited strong support in the form of nods and affirmative utterances (“mmmmhhmm,” “yes,” “exactly”) from other participants.
I think at one point breastfeeding was hands down, far and above, better than any formula that was out there. But I think with all the research that’s been done and knowing more and more of what’s in breastmilk, I think the formula companies are getting closer to breast milk. There’s not as big of a discrepancy between formula and breast milk as there used to be. [Formula Group]

Knowing that I could find a formula that was close to my breast milk was very comforting. It’s like, “Okay. He may not have my breast milk but he’s gonna have something that’s close to it to choose from.” [Formula Group]

It’s talking about the stools and it shows like breastfed and then formula and then right in the middle there’s Similac. And so it’s saying there’s this nice ‘in between’. You’re…you know, if you don’t want to go formula but you’re having a tough time with breastfeeding… [Pregnant Group]

I mean it shows…the different nutrients it has in it, that it’s most similar to breastmilk and there are some different things on that larger one [stool sample] that makes it look like it’s not quite formula. You know. It’s like the in between. It’s not… [Pregnant Group]

They refer to it as Early Shield and they’re kind of getting away from that formula word… It’s like they’re trying to come up with a new category. [Formula Group]

**Expectation of Failure**

Many participants reported that the advertisements conveyed an expectation that breastfeeding mothers would need to supplement or wean earlier than expected. The discharge bags were labeled for breastfeeding moms, but had samples of infant formula in them, which implied that they would need it, according to the participants.

I’m feeling…I mean the message I got…I don’t know if this is what they’re trying to send, but its “You can’t manage on your own,” and “We will step in.” That is the impression I get from…overall when I think about everything that I looked at today. You know? [Utters of agreement] And I should be grateful too because…Thank God they’re there [formula companies]. [Pregnant Group]

I’m getting the impression that there’s a pretty good chance that I might want to use formula at some point. [Pregnant Group]

It’s almost kind of like you know you want to breastfeed but eventually you’re going to go [to formula] so we’re going to go ahead and supply you. [Pregnant Group]

It’s kind of like they expect you to breastfeed. But then they’re almost like sort of expecting you to fail, and so when that time comes, you know, if you’ve got all this
Similac stuff, well where are you gonna go? What are you going to start using? [Pregnant Group]

When asked what message they take from the discharge bags, participants stated:

That enough people have trouble with it [breastfeeding] that they need a bag of formula handed to them at the end of the hospital. [Pregnant Group]

That there’s potential…you know. There’s most…probably, I want to say more than likely, there will be an occasion where you will probably need to use formula, I guess. [Pregnant Group]

Participants noted how the formula advertising language translated into societal dialogue, perpetuating the expectation of failure:

R1: Yeah. I mean I know I’ve heard the breastfeeding horror stories. Like people like to say, “Just in case you can’t do it, it’s okay!” I couldn't ... and you're just like...
R2: Well what if I just do fine?
R1: Yeah.
R2: Like what if… [Pregnant Group]

But it’s very interesting to me that the formula companies, obviously, and then society, seems to assume that there will be a high failure rate. And I don’t mean to make this the most basic, but we are mammals. I mean there are small mammals that have to find some way to survive as soon as they start breathing. And it’s interesting to me that in this age where people are intelligent and we have education and all this support that there’s just this assumption that breastfeeding won’t work. I mean everybody here has said, “We’re gonna try it.” Like, “Well, I’ve got these two legs. I’m just gonna see if I can get up and walk and I might need to use my gills later but I’m gonna try the legs first.” We’re all even kind of tenuous about it. Like “Well, we’re just gonna try. Don’t laugh at us if we don’t do well” instead of, “Well, of course we’ll do fabulous!” [Pregnant Group]

Healthcare Providers providing Advertisements

Participants repeatedly emphasized that formula advertisements provided by health professionals led them to believe that exclusive breastfeeding is not important, which was reported to incite confusion about infant feeding education and doubt about the importance of committing to exclusive breastfeeding.

But seeing it [infant formula advertising] out of context in the hospital, given to you by your doctor, that’s where it gets really confusing for me. [Pregnant Group]
“Oh. Okay, this is…” You know. I don’t think the doctor would give it to me if it wasn’t recommended or, you know, if they thought the information in it was wrong. [Pregnant Group]

I think it’s crazy because they…the doctors encourage you to breastfeed but then, you know, “Enter to win $100.00 free formula here and there” and it’s everywhere. And I don’t know where everyone else goes but I love my doctors and I feel great about them. [Pregnant Group]

Participants frequently reported feeling disappointed in their providers, and often a loss of trust in pediatricians providing infant formula samples.

I know from experience that it takes an incredibly supportive community in the immediate vicinity when you’re trying to breastfeed, especially in the first week, and to have someone standing there saying, “Well, just give them this formula.” That just devastates me because I felt like I wasn’t getting the support. [Exclusive Breastfeeding Group]

DISCUSSION

The results of these focus groups provide insight into how women interpret infant formula advertising, and enhance our understanding of the negative correlation between exposure to infant formula advertising and optimal breastfeeding. Given the ubiquity of infant formula advertising, it is of great concern to find that, after exposure to these materials, women expressed doubt about the superiority of their own human milk, regarded infant formula as a clinical solution to normal infant issues, and believed infant formula is now very much like human milk. Furthermore, it is important to note that there were expressions of self-doubt, disempowerment and lack of support after considering the advertisements.

The likelihood of women believing that infant formula is equivalent or even superior to human milk is heightened when a woman is exposed to infant formula advertising in her doctor’s office or in the hospital. Participants reported looking to the healthcare industry for unbiased feeding information and naturally trusting any information distributed by healthcare providers as accurate. We found that participant awareness that specific advertisements were distributed in healthcare settings promoted an expectation of failure with breastfeeding. This self-doubt led
participants to comfort themselves with the idea that perhaps formula is “close enough.” This is a worrisome concept that has been shown prevalent in the literature, with about a quarter of Americans sharing this belief (16,18).

Formula manufacturers have been accused of making false and misleading claims in their advertisements (22-24). The advertisements now reference research studies to support their claims. This aspect of the advertisements increased participant confusion and doubt about the superiority of human milk over formula. Just two participants expressed questions about the validity of the research cited, both of whom were in the exclusively breastfeeding group. Thus, it is reasonable to hypothesize that such research comprehension could mitigate the deleterious impact of infant formula advertising on breastfeeding practices.

**Difference among Pregnancy Group**

The majority of statements about self-doubt, confusion and disempowerment came from the group of pregnant women and the group of formula-feeders. From this sample it appears that women are less influenced by infant formula advertisements before they become pregnant, but began to doubt what they knew about breastfeeding and/or get confused about infant feeding during pregnancy. This suggests that pregnant women may be particularly susceptible to the confusion and self-doubt that results from exposure to advertisements. This is highly problematic, given the reported inundation with infant formula marketing during pregnancy, when women may be in a heightened emotional state. These same experiences of confusion and self-doubt may have contributed to the feeding decisions made by those in the formula-feeding group.
Strengths and Limitations

Limitations to this study should be addressed in any future research on the subject. One limitation is that the sample was not representative of the larger population of NC or the US. Participants were wealthier and more educated than the average North Carolina or American population. This research question would be well-served to be asked in a lesser-educated, lower-income population. However, the fact that the advertisements incited such doubt and confusion among a group of highly-educated women is noteworthy, as lesser-educated women would arguably be even less equipped to interpret the scientific information that was reported to be so misleading.

Another limitation is that focus group studies do not generally offer proof of causality. They do, however, add a unique layer of depth to the research question, since they allow the recording and interpreting of immediate reactions to the marketing materials, and offer an opportunity to explore further the emotions and/or beliefs that a particular advertisement may provoke. An additional strength of the study is the variability among the groups, which allowed for identification of differences in the way women of differing reproductive stages interpreted the marketing materials.

Recommendations

Eliminating infant formula advertising may not be possible in a capitalist society such as the US. However, as evidenced by drafting of the International Code of Marketing of Breastmilk Substitutes (Code), infant formula is a product that must be considered as unique from other advertised products because of its proven association with negative health outcomes. This study demonstrates that women are misled by the statements made in infant formula advertisements.
Implementation and regulation of the Code is the ideal goal internationally. In the US, few of the Code’s articles are complied with and there is no regulation (25). We must look to the Federal Trade Commission (FTC) as the responsible government party for protecting consumers from false and misleading claims in advertising. There is clear justification from this study for the FTC to enforce existing regulation and to develop more effective regulation of infant formula industry advertising. This will help to prevent further misconceptions about infant feeding.

Of paramount importance is the elimination of all forms of infant formula advertising in healthcare settings, since this is shown to increase false beliefs and decrease self-efficacy. Efforts currently underway include the Baby Friendly Hospital Initiative \(^1\) and Ban the Bags\(^2\). These and similar efforts should be supported and expanded. Providers should be made aware of the impact of their distribution of commercial infant formula advertising. They should be called upon to adhere to their Hippocratic Oath to “do no harm” by ceasing distribution of infant formula advertisements. The tendency of women to interpret infant formula advertising as shown in this study is an important piece of knowledge for healthcare providers and other professionals as they develop anticipatory guidance for families considering infant feeding.


\(^2\) [http://www.babyfriendlyusa.org/eng/index.html](http://www.babyfriendlyusa.org/eng/index.html)
CONCLUSION

Despite clear evidence and decades of breastfeeding promotional and educational information made available to the public, many women remain confused regarding whether breastfeeding is the best way to feed an infant. While this could be considered a failure on the part of public health breastfeeding advocates, culpability lies with infant formula manufacturers, whose persuasive advertising has been shown by this study to lead to doubts about human milk and confusion about infant feeding. Healthcare administrators are also culpable for accepting free formula and incentives to market and distribute to patients. The multi-million dollar campaigns promoting the expanding infant formula product line threaten the progress this country has made in educating the public about the risks of not breastfeeding. These campaigns also undermine public health efforts to increase breastfeeding rates.

Current regulations of the messages contained within infant formula advertisements are not sufficient; additional regulation and enforcement is needed. Infant formula marketing should be eliminated from the healthcare industry, while breastfeeding educational information, for pregnant women especially, should be expanded. On the heels of the Surgeon General’s Call to Action to Support Breastfeeding and the United States Breastfeeding Committee’s recent Statement on Marketing of Breastmilk Substitutes\(^3\), the time is now for public health practitioners, healthcare providers and hospital administration to work together to ensure clear infant feeding beliefs among caregivers.

REFERENCES


APPENDIX

1. Similac Hospital “Breastfeeding” Discharge Bag
Bowel movements - also called stools - vary from baby to baby in frequency, size, color and texture. A few factors that may affect your infant's stools include feedings, illness, and medication. However, having some guidelines for what to expect can be helpful. Keep in mind the information here is only a guide - if you have any questions or concerns, talk with your baby’s doctor or nurse.

What is "typical" for most babies?

Breastfed stools
Usually yellow, soft/bnose, and sometimes seedy. Breastfed infants tend to have more frequent stools than formula-fed babies at least the first 2 months of life. The number of stools a day usually decreases as the baby gets older.

Similac Advance EarlyShield™ stools
In a recent clinical study, the stools of infants fed Similac Advance EarlyShield were softer, more like those of a breastfed infant.

Formula-fed stools
Typically firmer than breastfed stools. The color varies — yellow, green and brown are all common. There may be differences in your baby’s stools depending on which formula you feed. In addition, formula without palm olein or may produce softer stools.

What are signs to watch for?

Constipation
Stools that are one or more of the following:
- Small and hard
- 2-3 or more days apart
- Painful or uncomfortable to pass. Note: Most babies strain and grunt during a bowel movement - these by themselves are not signs of constipation.

Diarrhea
More frequent, watery stools. Occasional loose stools are not necessarily cause for alarm. But diarrhea can cause dehydration, so call your baby’s doctor if the problem persists.
A. Similac Hospital “Breastfeeding” Discharge Bag Insert # 1 (back page)

Stooling Patterns
Commonly Seen in Infants

Infants stooling patterns vary, but here are some common patterns you may observe:

<table>
<thead>
<tr>
<th>Age</th>
<th>Stools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 days</td>
<td>Thick, tarry and black color</td>
</tr>
<tr>
<td>3-4 days</td>
<td>Greenish-yellow color</td>
</tr>
<tr>
<td>5 days</td>
<td>Yellow color (NOT white or clay-colored) with watery, seedy or mustard-like texture</td>
</tr>
<tr>
<td>By 5-7 days</td>
<td>3-4 stools/day</td>
</tr>
<tr>
<td>1 month &amp; older</td>
<td>Number of stools may vary (can be several stools/day, 1 every 3-4 days or 1/week). Ask your doctor if you have concerns.</td>
</tr>
</tbody>
</table>

Similac Advance EarlyShield™ is the only infant formula that has our unique blend of prebiotics, nucleotides and antioxidants (carotenoids)—nutrients naturally found in breast milk.

![Prebiotics:](image1)

Prebiotics: Special carbohydrates that can be naturally found in breast milk. Prebiotics help support healthy growth and development of beneficial bacteria in the gut.

![Nucleotides:](image2)

Nucleotides: Special nutrients naturally found in breast milk. Nucleotides are building nutrients that help increase baby's ability to make important antibodies.

![Antioxidants (Carotenoids):](image3)

Antioxidants (Carotenoids): Fat-soluble substances naturally found in breast milk. Antioxidants help protect baby's cells and tissues from damage.

Breastfeeding is best. But if needed, choose the infant formula that's designed to be more like breast milk and to support baby's natural defenses.

Whether you're formula feeding or supplementing your breast milk, it's good to know that Similac Advance EarlyShield is designed to be more like breast milk and to help build a strong immune system.

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Abbott Nutrition
Abbott Laboratories
Columbus, Ohio 43219-3034 USA

Abbott
Nutrition
B. Similac Hospital “Breastfeeding” Discharge Bag Insert #2 (front and back)
2. Enfamil Hospital “Breastfeeding” Discharge Bag
A. Enfamil Hospital “Breastfeeding” Discharge Bag Insert # 1
Introducing Enfamil® Staged Formulas

Individually tailored to meet your baby's changing nutritional needs.

Look inside for valuable offer.


FREE informative articles, booklets and emails.
FREE samples and discounts.
3. Image of Similac Advance EarlyShield™ package, a ready-to-feed infant formula 6-pack
4. Enfamil Web Advertisement

Feeding issues are tough. Addressing them can be easy.

Quiets colic symptoms* fast, often within 48 hours.**

Designed for babies with fussiness or gas.

Clinically proven to reduce spit up by more than 40%**

* Due to cow’s milk protein allergy.
** Based on clinical studies of the same formula before the addition of LIPIL.

FOR A FREE FORMULA SAMPLE CLICK HERE >
You’ll feed his imagination. We’ll help feed his immune system.