

**AN INVESTIGATION OF
BABY FORMULA MARKETING PRACTICES IN THE HEALTH CARE SETTING**

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ABSTRACT

ANNE FRANCES JOHNSON: An Investigation of Baby Formula Marketing Practices in the Health Care Setting

(Under the direction of Tom Linden, Jane Brown and Lewis Margolis)

Breastfeeding is widely recognized as the healthiest option for feeding infants. Manufacturers of baby formulas, however, employ multiple marketing tactics to persuade parents to supplement or replace breast milk with commercial formulas. Many health care providers contribute to these marketing efforts either through active promotion or implied endorsement of formulas. In doing so, these health care providers are acting in direct conflict with international recommendations and are, in effect, helping to promote products that are against the best interests of their patients. Although formula marketing in the health care setting is widespread in the United States today, the issue has received only superficial media coverage. Through a series of three stories designed for a print outlet, this thesis aims to shed light on formula marketing practices in health care settings and examine efforts to curb these practices.

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INTRODUCTION

The past 100 years have seen dramatic changes in the way babies in the United States are fed. Breastfeeding, which was the norm for most of human history and is today recognized by medical professionals and public health practitioners as the healthiest way to feed infants, declined sharply from the early 20th century through the 1970s. This decline was accompanied by tremendous growth in the baby formula industry as more parents began using breast milk substitutes at earlier infant ages. Although breastfeeding has increased since the 1970s, rates of breastfeeding initiation, exclusivity and duration continue to fall short of national health goals. The formula industry remains strong.

Recognizing the health, financial and other benefits of breastfeeding, public health practitioners have developed numerous interventions to increase breastfeeding rates in the United States. These interventions aim to increase women's interest in breastfeeding and their ability to do so by addressing barriers to breastfeeding for new mothers, in the hospital, in the workplace and at many other levels. These efforts are critical to continuing the breastfeeding gains made in the past 40 years.

One barrier to breastfeeding that has proven particularly difficult to address over the years is aggressive formula marketing, through which companies aim to persuade mothers to supplement or replace breast milk with formula. Formula marketers target both the general public (through television, print and Internet advertisements and other methods) and health care practitioners (through advertisements in medical journals, financial support of professional societies, and training seminars). In some cases,

companies market to the general public *through* health care providers, who actively or implicitly endorse the use of formula by distributing free samples, coupons and other company-provided materials to their patients.

Health care providers have many ethical responsibilities to their patients, including obligations to provide quality care and to avoid helping to promote products that may be against their patients' best interests (American Academy of Pediatrics, 2007; American Medical Association, 2009; American Medical Association, 2003; American Medical Association 1999; Cicero et al., 2011). Participating or being complicit in formula marketing efforts undermines messages from the medical and public health communities that babies should be exclusively breastfed for the first six months, with continued breastfeeding through the first year and beyond. Studies show that these formula marketing tactics can negatively affect breastfeeding behavior (Howard et al., 2000; Kaplan & Graff, 2008). Helping to promote formula in the health care setting, therefore, represents an ethical problem as well as practical barrier to breastfeeding. Furthermore, promotion of formula in the health care setting directly conflicts with the recommendations of numerous domestic and international medical associations and public health groups (Gartner et al., 2005; United Nations Children's Fund, 2005; World Health Organization, 1981).

In this project I investigated the promotion of formula to consumers in health care settings. Health care settings include any place (physical or virtual) people go to receive health care or advice from trusted medical professionals. The focus of this project is hospitals and offices of obstetricians, midwives and pediatricians, although official materials of medical and health-oriented professional societies or government bodies

might also be considered health care settings. I have attempted to gauge how common formula marketing practices are in health care settings today and examined the motivations of health care providers who participate in formula marketing despite recommendations that they avoid doing so. I also looked at efforts among public health practitioners and breastfeeding advocates to curb these marketing practices and investigated the barriers that they face in enacting change.

LITERATURE REVIEW

The Case for Breastfeeding

Breastfeeding is widely recognized as the healthiest option for feeding infants, and increasing breastfeeding rates is seen as an important public health goal (Gartner et al., 2005; U.S. Department of Health and Human Services, 2010). The practice benefits babies, mothers, families and society (United States Breastfeeding Committee, 2002). Numerous international and domestic health organizations endorse breastfeeding; many have developed interventions to increase breastfeeding initiation and duration (Shealy et al., 2005).

Health Benefits for Babies

Breastfeeding benefits infant growth, development, health and immunity. Breast milk contains all the nutrients, water and energy babies need for the first six months of life; it also contains growth factors, immune factors, hormones and live cells that confer health benefits in infancy and later in life (Picciano, 2001). A 2007 meta-analysis of infant health outcomes found that babies who were breastfed showed a reduced risk of acute otitis media (middle ear infection), non-specific gastroenteritis (upset stomach), severe lower respiratory tract infections, atopic dermatitis (a chronic skin disorder), asthma, obesity, types 1 and 2 diabetes, childhood leukemia and sudden infant death syndrome (SIDS) (Ip et al., 2007). Breastfeeding also has been associated with lower rates and severity of diarrhea, bacterial meningitis and other conditions (Gartner et al.,

2005). Premature infants who receive breast milk show improved immunity and development (Gartner et al., 2005) and are at a reduced risk for necrotizing enterocolitis (death of intestinal tissue) (Ip et al., 2007).

The magnitude of these positive health effects varies with the duration and exclusivity of breastfeeding—generally, infants who are breastfed exclusively and for a longer period show greater health benefits. However, even limited breastfeeding improves infant health outcomes. In the United States, one study of 9,000 babies showed that infants who were ever breastfed had a 21 percent lower risk of mortality than those who were never breastfed, although it is difficult to completely separate the effects of breastfeeding from other factors, such as the skills, abilities, and emotional attachments associated with breastfeeding that could potentially influence child survival independently of the effects of breast milk itself (Chen & Rogan, 2004).

Health Benefits for Mothers

Breastfeeding has health benefits for mothers both in postpartum and later in life. Breastfeeding increases uterine contractions and decreases postpartum bleeding (Gartner et al., 2005). Some studies suggest that breastfeeding helps women return to their pre-pregnancy weights, although these findings are mixed (Ip et al., 2007). Breastfeeding also has been shown to reduce fertility and thus increase the spacing between pregnancies, which has health benefits for both mothers and babies (Labbok, 2001). In the long term, a history of breastfeeding has been shown to reduce a woman's risk of developing type 2 diabetes, breast cancer and ovarian cancer (Ip et al., 2007). The health benefits of

breastfeeding for both mothers and babies may vary depending on whether the baby is fed at the breast or is fed pumped or expressed breast milk (Thulier, 2010).

Benefits for Families and Society

Breastfeeding has health, financial and environmental benefits for those beyond the mother-baby dyad. Families and society as a whole are affected by women's breastfeeding choices.

Health-related benefits: The health benefits of breastfeeding—and the increased health risks of not breastfeeding—have broad implications for public health, the health care system and the financial burdens of illness. Among the conditions reduced by breastfeeding are some of the most common and burdensome chronic diseases in the United States today: diabetes, obesity and cancer (National Center for Chronic Disease Prevention and Health Promotion, 2009). Increasing breastfeeding could help reduce the financial costs of these conditions (Centers for Disease Control and Prevention, 2007; World Cancer Research Fund, 2007). Babies who are breastfed also require shorter hospital stays, less frequent doctor visits and fewer prescription drugs than babies who are not breastfed (Ball & Wright, 1999); increasing breastfeeding could therefore reduce health care expenses paid by health insurance companies, individuals, employers and governments.

Considering the cost burden of only three health conditions—otitis media, gastroenteritis and necrotizing enterocolitis—Weimer (2001) projected annual savings of \$3.6 billion if breastfeeding rates were increased to the levels recommended by the

Surgeon General (75 percent of infants exclusively breastfed in the hospital and 50 percent at 6 months of age). A follow-up study in 2010 estimated 911 lives and \$13 billion per year would be saved if 90 percent of U.S. families were able to comply with recommendations to exclusively breastfeed for six months (Bartick & Reinhold, 2010). In addition, parents of breastfed children generally have to stay home less often to care for sick children, causing fewer days of missed work and increasing productivity (Gartner et al., 2005).

Direct financial benefits: Breastfeeding also can save families and society money by reducing the money spent on formula. Formula-feeding an infant is estimated to cost families between \$1,000 and \$1,500 per year, or more for ready-to-use and specialized formulas—a cost that has increased faster than inflation (Consumer Reports, 2007; Oliveira et al., 2001; United States Breastfeeding Committee, 2002b). It is important to recognize that breastfeeding also can have costs, however. Mothers who work outside the home may need extra time off in order to breastfeed their infants or express milk through pumping or other means, potentially incurring time burdens or reductions in earnings greater than those incurred by working mothers who use formula exclusively. In addition, lactating women require more food than those who are not breastfeeding, although the annual cost of additional food for lactating women is estimated at one half to one quarter of the cost of purchasing a year's supply of powdered formula, which is the least expensive type of formula (Riordan, 1997; United States Breastfeeding Committee, 2002b).

The cost of formula is not only borne by families with children. More than half of the formula sold in the United States each year is purchased with taxpayer dollars from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC Program). In 2005, taxpayers spent \$600 million on formula for the WIC Program (the program actually spent \$2.3 billion on formula, but the significant rebates offered by formula companies allow the WIC Program to recoup 86 percent of the wholesale cost of the formula it purchases) (Oliveira & Frazão, 2009).

Environmental benefits: Finally, breastfeeding comes with far fewer environmental costs than formula feeding does. The production and shipping of formula consume energy and increase pollutants in air and water; disposal of formula packaging contributes trash to the landfills (United States Breastfeeding Committee, 2002). On the other hand, breastfeeding requires no factories, shipping or packaging.

Breastfeeding Recommendations

Given the well-documented health and other benefits of breastfeeding, numerous domestic and international organizations have issued recommendations for optimal breastfeeding practices. The World Health Organization (WHO), American Academy of Pediatrics, American Academy of Family Physicians, American College of Nurse-Midwives, American Dietetic Association and Academy of Breastfeeding Medicine all recommend exclusive breastfeeding for the infant's first six months of life (Academy of Breastfeeding Medicine Board of Directors, 2008; American Academy of Family Physicians, 2010; American College of Nurse-Midwives, 2004; Gartner et al., 2005;

James & Lessen, 2009; WHO, 2010). Exclusive breastfeeding means no supplemental water, food, juice or nonhuman milk, but may include supplemental vitamins, minerals and medications (Gartner et al., 2005).

Beyond the first six months, most organizations recommend continued breastfeeding, supplemented by complementary foods, at least until the baby's first birthday. Some organizations do not provide a recommendation beyond one year of age (e.g., the "HHS Blueprint for Action on Breastfeeding," U.S. Department of Health and Human Services, 2000). Others recommend breastfeeding beyond the first year "for as long as mutually desired by mother and child" (Gartner et al., 2005). Still others, such as the WHO and the Academy of Breastfeeding Medicine, recommend continued breastfeeding for up to age 2 and beyond.

Breastfeeding is not universally recommended for all women and all babies. The WHO, American Academy of Pediatrics and others identify conditions under which breastfeeding is not optimal, such as when a mother is using illicit drugs, has active untreated tuberculosis or is receiving radiation treatment, or when a baby has rare disorders that prevent proper digestion of breast milk (Gartner et al., 2005; WHO, 2009).

Current Breastfeeding Rates

Breastfeeding practices in the United States today do not align well with the recommendations described above. Three out of four infants were ever breastfed in 2007; however, only 13 percent were exclusively breastfed at 6 months and only 43 percent were receiving any breast milk at that age. Only 22 percent were receiving any breast milk at age 1 year (CDC, 2010).

U.S. breastfeeding rates also fall short of the objectives of “Healthy People 2010,” part of a series of reports that outline the nation’s health priorities and set “ambitious but achievable” goals every 10 years (DHHS, 2010; DHHS, 2000b). With the exception of one indicator (any breastfeeding in early postpartum), all indicators measured in the Centers for Disease Control and Prevention (CDC) 2010 Report Card (using 2007 data) fall below 2010 goals (see Table 1). Furthermore, although U.S. breastfeeding rates have increased substantially since the 1990s and previous decades, they rose only slightly during the past decade (see Figure 1).

Table 1. Proportion of infants receiving any breast milk: 2007 rates and targets for 2010 and 2020.

	Early Postpartum	At 6 months	At 1 year
2007 Breastfeeding Rates [*]	75	43	22
<i>Healthy People 2010</i> Target ^{**}	75	50	25
<i>Healthy People 2020</i> Target ^{***}	82	60	34

^{*} CDC, 2010

^{**} DHHS, 2000b

^{***} DHHS, 2010

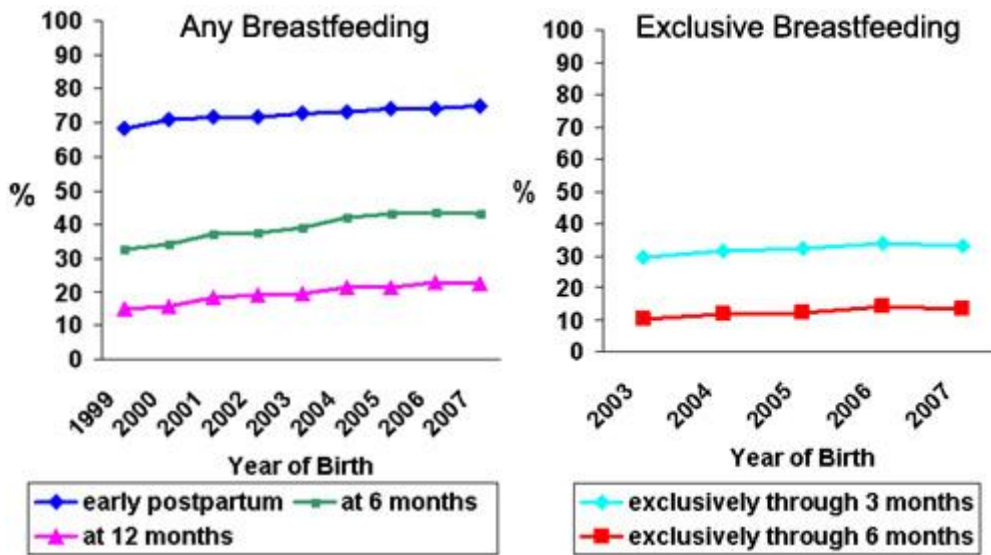


Figure 1. U.S. breastfeeding rates 1999-2007 (the latest year for which data are available). Breastfeeding increased only slightly during this period; breastfeeding at 6 months and 1 year remained below *Healthy People 2010* goals. SOURCE: CDC, 2010b.

Interventions to Increase Breastfeeding

Given that U.S. breastfeeding rates have consistently fallen short of national goals and international recommendations, many governmental, advocacy and medical organizations are working to increase breastfeeding initiation and duration. These organizations have initiated interventions to protect, promote and support breastfeeding that variously target individual mothers, families, communities, hospitals, workplaces, cultural norms and policy changes (Shealy et al., 2005).

Some interventions focus on increasing mothers' interest in breastfeeding and their ability to initiate breastfeeding. These include programs to educate mothers about the benefits of breastfeeding, programs to support breastfeeding initiation in hospital maternity care centers and social marketing campaigns to improve attitudes and perceptions of breastfeeding (Shealy et al., 2005). Other interventions focus on increasing

mothers' ability to continue breastfeeding in the long term. These include programs that increase women's access to lactation consultants and other professional support after returning home from the hospital, peer support programs and programs and policies to support breastfeeding in the workplace (Shealy et al., 2005). Some efforts to increase breastfeeding focus on restricting the marketing of infant formula. See "Formula Marketing Regulations" below for a detailed discussion of this topic.

The Formula Industry

Breastfeeding is the natural default method for humans to feed their infants. Not every woman can breastfeed, however, and not every baby has access to the mother's breast. Death, disease, separation and physiological problems have made breastfeeding impossible for some mothers and children throughout human history. These factors, combined with cultural, financial and scientific influences, led to the development of today's infant formula industry. A brief history and overview of the formula industry is provided here as background for the discussion of formula marketing practices to follow.

Beginnings

Before the 19th century, infants who could not be fed by their mothers were fed breast milk from a wet nurse (a lactating woman other than the infant's own mother); milk from other mammals; or "pap," a mixture of carbohydrates and liquid (such as bread and water or flour and milk) (Apple, 1987; Fildes, 1986). As scientific methods improved throughout the 1800s, chemists and physicians experimented with ways to modify cow's milk to make it more easily digestible for babies. German chemist Justus von Liebig is

credited with developing the first commercially-marketed food for infants in the 1860s (Fomon, 2001). Available in liquid and powder form, “Liebig’s Food” was a mixture of cow’s milk, wheat flour, malt flour and potassium bicarbonate (Apple, 1987). The word “formula” developed during this period, when those preparing the mixtures used complex mathematical formulas to determine the ratios of various ingredients based on the baby’s age, weight, and other physical characteristics (Wolf, 2006). By 1883, at least 27 infant formulas had been patented (Fomon, 2001).

20th Century Developments

Around the turn of the 20th century, more women began replacing breastfeeding with formula or straight cow’s milk before their infants were 3 months old (Wolf, 2003). These women represented the entire economic spectrum: wealthier women who could hire nurses to bottle feed their infants increasingly did so in order to devote more time to their husbands and other interests, while urban, working-class mothers found it financially beneficial to leave the baby at home to be bottle fed by an older sibling while the mother went to work (Wolf, 2003). Although this early turn away from breastfeeding sometimes had disastrous health consequences for infants, it demonstrated that social and cultural conditions had created a receptive environment for formula, and the formula industry gained steam in the 1920s as sanitary practices for milk processing, packaging, shipping and storing became widespread (Fomon, 2001). By that point, scientists also had learned more about the differences between cow’s milk and breast milk, allowing them to modify infant formulas to better meet babies’ nutritional needs (Fomon, 2001).

Long-term measures of formula consumption are not publicly available, so patterns of formula use must be deduced from breastfeeding data, studies on the composition of infant diets and changes in the formula industry. Between 1930 and 1970, breastfeeding rates declined noticeably and the formula industry grew rapidly. By the late 1940s, studies showed that 50 to 70 percent of babies were initially breastfed, with only 20 percent being breastfed for at least six months (Fomon, 2001). Breastfeeding rates reached their lowest point in the early 1970s, when only 25 percent of infants were breastfed at age 1 week and 14 percent between ages 2 and 3 months (Fomon, 2001). As breastfeeding declined, most parents replaced breast milk with a combination of formula, straight cow's milk and infant cereals. By the 1970s, many parents started their babies on formula at birth, introduced cow's milk and cereals within a couple of months and ultimately replaced formula altogether with these less expensive foods by age 4 to 6 months (Fomon, 2001).

After the 1970s, breastfeeding rates began to increase. Since then, rates have bounced up and down in a pattern scholars have found difficult to explain (Fomon, 2001; Wolf, 2003). Even as breastfeeding increased through the 1980s and 1990s, however, the formula industry continued to grow. A series of studies starting in the 1960s led to questions about the health effects of feeding young infants straight cow's milk; as a result, more families began using formula rather than cow's milk once they had stopped breastfeeding, or as a supplement to breastfeeding (Fomon, 2001).

Formula ingredients and preparation methods went through many changes during the 20th century (Fomon, 2001). For the first half of the century, most formula was prepared at home by mixing evaporated milk with water and carbohydrates. Gradually,

manufactured powdered formulas, concentrated liquids and ready-to-feed formulas overtook home preparation. Along the way, manufacturers incorporated various additives (e.g., iron, lactic acid, fatty acids) to improve nutritional content, digestibility, shelf life and other factors. In addition, special formulas were developed to meet the needs of certain infants, such as those born prematurely and those allergic to milk. The Infant Formula Act of 1980 set nutritional standards for baby formula and gave the Food and Drug Administration the authority to enforce these standards.

Current Landscape

Formula use is widespread in the United States today, and there is a vast selection of formulas available on the market. The Infant Feeding Practices Study II, a longitudinal national study conducted by the Food and Drug Administration from 2005 to 2007, showed that most U.S. infants were fed formula, breast milk, or a combination of the two until age 4 to 5 months, when feeding began to be gradually supplemented with cereals, juices, cow's milk and other foods (Grummer-Strawn et al., 2008). About half of babies in the study were fed formula in the hospital shortly after birth. That percentage increased steadily with age, to a peak of 70 percent of babies receiving formula at 9 to 10 months of age. The increase in formula use over the course of a baby's first year appeared to be inversely proportional to the decrease in breastfeeding during the same period. Formula use and breastfeeding rates were uneven across racial and socioeconomic lines. Mothers who were poorer, younger, less educated and unmarried were more likely to supplement breast milk with formula; Hispanics and African Americans were more likely to supplement breast milk with formula than whites (CDC, 2010c).

About \$3.5 billion in infant formula was sold in 2007 (Oliveira et al., 2010). Although the volume of formula sold has remained relatively stable since the late 1990s, and indeed dropped five percent between 2004 and 2007, the amount spent on formula has risen as a result of increasing prices (Oliveira et al., 2010; Oliveira, 2004). In 2008, three companies held 98 percent of the formula market. Abbott, maker of Similac, accounted for 43 percent of sales; Mead Johnson, maker of Enfamil, accounted for 40 percent; and Nestlé, maker of Gerber Good Start, accounted for 15 percent (see Figure 2) (Oliveira et al., 2010). Most formula sold in the United States is cow's milk-based (80 percent in 2008), with soy-based formulas ranking second (14 percent in 2008). Most formula is sold in powder form (83 percent in 2008), with liquid concentrate and ready-to-feed formulas, which are more expensive than powdered formulas, comprising the rest (Oliveira et al., 2010).

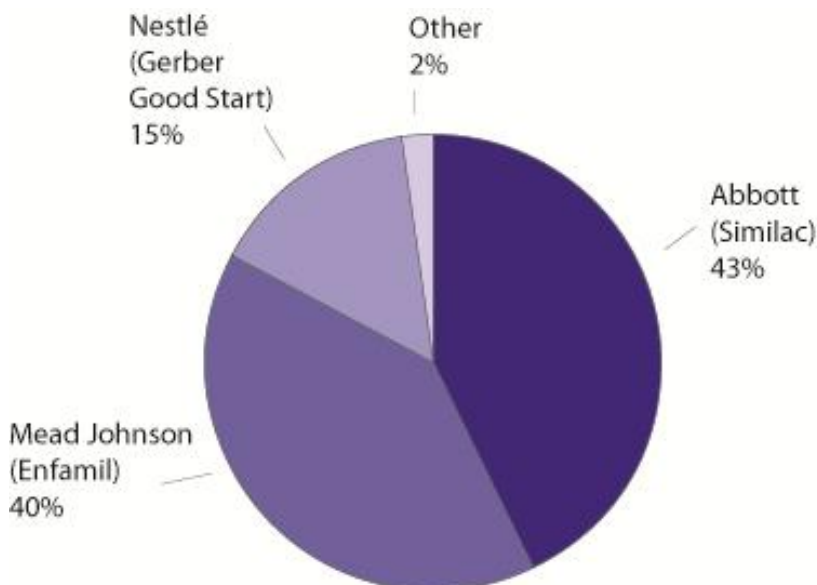


Figure 2. Baby formula sold in the United States in 2008, by company. The U.S. formula market is highly concentrated, with just three companies—Abbott, Mead Johnson and Nestle—generating 98 percent of sales. Data from Oliveira et al., 2010.

The formula market has been closely intertwined with the WIC Program since the late 1980s, when cost-containment measures were instituted requiring states to award sole-source WIC contracts to formula companies based on a bidding process. Oliveira et al. (2010) estimate that more than half of the infants in the United States participate in the WIC program and that between 57 percent and 68 percent of formula sold in the United States (by volume) is purchased through WIC. Because state WIC Programs purchase formula in such great quantities, formula companies offer significant rebates for WIC purchases, and the relative market dominance of the various formula manufacturers is closely associated with state WIC contracts.

Formula Marketing

Because most baby formula customers need to use formula for only a few years at most, companies must constantly work to attract new customers and build brand loyalty. Formula marketing practices underwent several major shifts throughout the development of the formula industry, leading up to the current climate in which formula is aggressively marketed to both the general public and health practitioners. In some cases, health practitioners participate in efforts to promote formula to patients. These and other practices have drawn international criticism, but U.S. state and federal governments have been reticent to restrict formula marketing.

Overview and History of Marketing Methods

When the first commercially-marketed infant formulas entered the scene in the late 1800s, manufacturers advertised their products to physicians and the general public

in medical and non-medical journals; they also distributed pamphlets, trade cards, posters and free samples (Apple, 1986). These marketing materials frequently tapped into mothers' fears for their babies' health and their faith in science. From the early days, some in the medical community expressed concern that marketing formulas directly to the public would discourage breastfeeding and result in misuse of formula and harm to babies (Greer & Apple, 1991). Gradually, physicians and formula companies developed a symbiotic relationship wherein physicians endorsed, prescribed and managed the administration of baby formulas, while manufacturers marketed primarily—and, for about 50 years, exclusively—to the medical community (Greer & Apple, 1991).

The relationship between doctors and formula makers became more formalized in the 1930s. In the early 1930s, the American Medical Association (AMA) developed its “Seal of Acceptance” and used it to endorse the advertising claims of food products (Greer & Apple, 1991). The AMA also established guidelines for advertising infant foods, which specified that formulas should be marketed only to physicians, not to the general public. Although formula makers were free to ignore the AMA guidelines, those who complied and sought the AMA “Seal of Acceptance” fared much better in the market (Greer & Apple, 1991). Formula makers quickly ramped up promotion targeted at physicians: formula advertisements became common in medical journals, manufacturers delivered presentations at medical conferences, and formula companies funded medical research and scientific meetings. Companies also began giving hospitals formula without charge for their use and samples for hospital personnel to give to new mothers (Greer & Apple, 1991).

The formula marketing landscape underwent a dramatic shift starting in the late 1980s. Nestlé, which had been out of the U.S. market since the 1940s, re-entered the scene in 1988 after it acquired the Carnation Company and then introduced two new formulas. Nestlé opted to ignore AMA guidelines and market the new formulas directly to the public through advertisements in lay magazines and newspapers (Greer & Apple, 1991). In 1989, Nestlé aired the first-ever television commercial for baby formula. The campaigns were successful, and other companies soon followed suit, releasing more television commercials and distributing free samples and coupons directly to parents (Greer & Apple, 1991). Much to the dismay of the AMA and others in the medical community (Greer & Apple, 1991), the dam had been breached, and formula has been marketed directly to the public ever since.

Formula makers today advertise to consumers through mass media (primarily television commercials, followed by print ads and then radio spots); by sending coupons and samples via direct mail to pregnant women and new mothers; and through pregnancy and parenting-oriented Web sites and social networks like babycenter.com and parents.com (CDC, 2010d; Cutler & Wright, 2002; Government Accountability Office, 2006). Despite the growth of direct-to-consumer formula marketing, marketing in the health care setting remains a key part of manufacturers' strategies.

Formula Marketing in the Health Care Setting

As described above, formula companies and health care providers have a long history together. Formula marketing in the health care setting today has two main aspects: (1) marketing efforts targeted *at* health care providers, and (2) marketing efforts aiming

to reach consumers *through* health care providers. Marketing efforts targeted at health care providers include the provision of free formula to hospitals, letters to providers describing the benefits of particular formulas, sponsorship of training for health care providers about formula products and monetary contributions to organizations such as the American Academy of Pediatrics (Government Accountability Office, 2006; Petersen, 2002). Marketing efforts that aim to reach consumers through health care providers are the focus of this thesis; current known practices are described in detail below.

Formula Sample Packs: Between 70 percent and 91 percent of U.S. hospitals routinely distribute packages containing formula samples and marketing materials to new mothers upon discharge from the hospital (CDC, 2008; Merewood et al., 2010; Merewood et al., 2008). Sometimes called diaper discharge bags, diaper bags, breastfeeding resource kits, or breastfeeding support kits, these packages are typically provided free of charge by formula companies to hospitals for distribution to mothers. They are often attractive purses, slings or backpacks that bear brand logos and contain formula samples, brochures, booklets, coupons, gift certificates and other branded materials such as bibs, nipples and ice packs for bottles (see Figure 3). Although most marketing materials in these packages state that breastfeeding is the preferred feeding option, the materials encourage mothers to begin supplementing breast milk with formula early, then to wean babies from the breast and to continue using formula through the first year of life, thus increasing sales while also ostensibly promoting breastfeeding (Curtis & Griesse, 1999).

Hospitals distribute these packs for two main reasons: (1) they have a financial incentive because formula companies provide hospitals with many free supplies for their

own use, and (2) some nurses and other hospital personnel view the packs as nice gifts for families that many patients have come to expect. Most U.S. hospitals receive all the formula they need, plus other supplies like nipples and pacifiers, free of charge from formula companies; in return, hospitals are expected to distribute the companies' formula sample packs to patients (Bartick et al., 2009; Merewood & Phillip, 2000). Refusing to accept formula typically provided without charge can impose new costs on hospital budgets, though these costs are not typically as high as formula companies may lead hospitals to believe (Bartick et al., 2009; Merewood & Phillip, 2000). Some hospital personnel support the distribution of formula sample packs because they provide useful baby supplies to patients, some of whom are financially needy (James, 1999). Some fear that refusing to distribute such packs would make mothers feel that they are being denied free gifts because they choose to breastfeed, or would put the hospital at a competitive disadvantage against others (Howard et al., 1994).



Figure 3. The “Gerber Generation backpack” (left) and “Similac Sling Pack” (right), distributed to mothers giving birth at participating hospitals. The vast majority of U.S. hospitals give patients free sample packs provided by formula companies. IMAGE SOURCE: Gerber Special Offers: http://www.gerber.com/Pregnancy/Special_Offers/Backpack.aspx (Accessed Jan 12, 2011); Similac Sling Pack: <http://similac.com/free-diaper-bag> (Accessed Jan 12, 2011).

The majority of studies examining the effects of these gifts have found that mothers who receive company-provided sample packs in the hospital show reduced exclusive breastfeeding or shorter overall breastfeeding duration (Government Accountability Office, 2006; Kaplan & Graff, 2008; Rosenberg et al., 2008). Although studies provide no definitive answer as to exactly why sample packs affect breastfeeding behavior, several scholars offer theories. Curtis and Griesse (1999) suggest that sample packs generate goodwill toward the formula companies, and that being handed a formula sample pack by a nurse sends a powerful positive message to patients about formula.

Others believe that mothers who have received free formula samples may be more quick to give up breastfeeding and switch to formula if they encounter difficulties with breastfeeding after returning home from the hospital (Curtis & Griesse, 1999; Heinig, 2006). Cutler and Wright (2002) identify hospitals as a critical arena for formula companies to reach new customers because the type of formula given to the mother in the hospital is a key determinant of her brand preference.

Materials in Prenatal Care Offices: In the early 1990s, formula companies began disseminating “educational materials” about infant feeding to the public through obstetric and family care offices (Howard et al., 1994). The literature indicates that this practice persisted at least until 2000, but no more recent studies are available. Although the materials often stated that breastfeeding is the preferred feeding method, such materials also encouraged expectant mothers to consider using formula and contained formula advertisements, coupons and business-reply cards for free samples (Howard et al., 2000; Howard et al., 1994). Howard et al. (2000) found that the vast majority of women receiving these materials (87 percent) reported reading them, with more than one-fifth sending in business-reply cards for a case of free formula before the birth of their infants. The same study showed that exposure to materials produced by formula companies during prenatal visits significantly increased breastfeeding discontinuation in the first two weeks after birth.

Materials in Pediatricians’ Offices: Formula samples and other marketing materials may also be routinely distributed to parents through pediatricians’ offices. Only one published

study was found that documents this practice (Howard et al., 1994), but formula advertisements encouraging parents to “ask your baby’s doctor for a FREE sample” of various products suggest that the practice is ongoing (see Figure 4).



Figure 4. Enfamil “First Visit Nutrition Gift for Breastfeeding and Supplementing Moms.” The company’s Web site encourages parents to request the gift from their pediatricians; kit includes Enfamil formula samples, nipples, bottles, vitamin drops, a nutrition guide for nursing mothers, a feeding guide and coupon for Enfamil products, a \$15 rebate offer for Enfamil products and a JCPenny portrait offer. The kit is one of 10 sample packs the company advises parents to request from their child’s pediatrician. IMAGE SOURCE: Enfamil Offers: <http://www.enfamil.com/app/iwp/enf10/content.do?dm=enf&id=-13493&iwpst=B2C&ls=0&csred=1&r=3472294183> (Accessed Jan 12, 2011).

Formula Advertising by Medical Organizations: Some organizations that are considered trusted medical resources have incorporated formula logos or advertisements into materials that purport to inform the public about breastfeeding. Although many organizations provide medical and health information while accepting advertising from formula companies, two—the American Academy of Pediatrics and WebMD—have attracted the most criticism because they are widely considered to be highly trustworthy

representatives of the medical community. Examples of advertisements accepted by these organizations include the following:

- Inclusion of the Ross logo on the front cover of books published by the American Academy of Pediatrics, including 300,000 copies of its *New Mother's Guide to Breastfeeding* (Petersen, 2002). Ross is a subsidiary of Abbott Laboratories, which makes Similac.
- Formula advertising on the WebMD breastfeeding information page (<http://www.webmd.com/parenting/baby/breastfeeding-9/default.htm>). Although WebMD is not strictly a health care setting, nor is it an official representative of the medical community, some contend that WebMD, as one of the leading and most trusted medical information websites, has ethical responsibilities similar to those of individual physicians and should not allow formula advertisements in the context of its information on breastfeeding (for example, see the blog discussion at <http://www.phdinparenting.com/2010/09/04/more-strange-bedfellows-webmd-breastfeeding-guide-sponsored-by-gerber-nestle/>).

Little is known about how formula advertising in the American Academy of Pediatrics' *New Mother's Guide to Breastfeeding* or on WebMD affects breastfeeding behavior and formula use. A 2006 review of the literature found no studies investigating the effects of formula marketing practices other than the distribution of samples and materials through hospitals and obstetric offices (Government Accountability Office, 2006), and no studies appear to have been published on the topic recently.

Formula Marketing Regulations

Formula marketing practices have attracted a significant amount of attention from medical and public health organizations in the United States and abroad, and many organizations and governments have made efforts to curb formula marketing. However, few regulations restricting formula marketing practices have been implemented in this country.

International Efforts: The most comprehensive set of guidelines for formula marketing is the International Code of Marketing of Breast-milk Substitutes (“the Code”) (WHO, 1981). Developed by the World Health Organization and the United Nations Children’s Fund (UNICEF), the Code was adopted by the World Health Assembly in 1981 and remains in effect today. All WHO member states endorsed the Code in 1981 except the United States, which endorsed it in 1994.

The Code was developed in response to controversies in the 1960s and 1970s about unethical formula marketing practices linked to preventable infant deaths in developing countries (Kaplan & Graff, 2008). The Code aims to promote breastfeeding as the healthiest and safest infant feeding option by creating an environment in which formula is available but not promoted. The Code prohibits all formula marketing targeted at the general public or health care workers, including direct advertising, the provision of donations or samples to hospitals or the public and the dissemination of anything other than factual or scientific information about formula to health care workers. The Code also requires formula companies to state on their product labels that breastfeeding is a

superior feeding method and prohibits them from displaying images of babies or other pictures idealizing the use of formula on their product labels (WHO, 1981).

Although strongly worded and endorsed by all WHO member states, the Code is nonbinding and has no international mechanism for enforcement. It relies on country governments to enact and enforce regulations restricting formula marketing. Many countries have enacted such regulations (WHO, 1998; WHO, 1990), but violations of the Code remain widespread (International Baby Food Action Network, 2010; International Baby Food Action Network, 2006).

Another important international effort to promote breastfeeding and restrict formula marketing is the Innocenti Declaration on the Protection, Promotion, and Support of Breastfeeding (United Nations Children's Fund, 2005). The Innocenti Declaration was developed in 1990 by a group of health leaders and was later supported by the WHO and UNICEF. The declaration called upon governments to take action to support breastfeeding, including actions to implement the marketing guidelines in the International Code of Marketing of Breast-milk Substitutes through regulation.

The declaration also spawned the Baby-Friendly Hospital Initiative, a WHO and UNICEF program to encourage the promotion of breastfeeding in hospital maternity centers (WHO et al., 2009). Hospitals can earn the "Baby-Friendly Hospital" designation by implementing certain breastfeeding-friendly practices, which include refusing free company-provided formula and declining to distribute formula sample packs to patients. Both the Innocenti Declaration and the Baby-Friendly Hospital Initiative are nonbinding, voluntary efforts to create a supportive environment for breastfeeding.

Domestic Efforts and the U.S. Regulatory Landscape: The United States has been reticent to impose any restrictions on infant formula marketing. The U.S. Food and Drug Administration regulates most formula similarly to any other food; additional regulations apply to special formulas that are available by prescription only (U.S. Food and Drug Administration, 2006). These regulations, however, concern only the ingredients, safety and nutrient labeling of formula, not how it is marketed. The Federal Trade Commission is responsible for enforcing fair practices in the marketplace, including advertising practices.

In 1981, the United States was the sole WHO member state to vote against the International Code of Marketing of Breast-milk Substitutes on the grounds that it violated free speech and restrained trade, a Reagan Administration stance that was opposed by many in government agencies, Congress and the public (Phillip et al., 2001). The United States eventually endorsed the Code in 1994 when President Bill Clinton signed on to an amendment that included an endorsement of the original Code. That move proved to be largely symbolic, however, as no regulatory actions have been taken to enforce the Code's implementation in the United States and violations of the Code remain pervasive (International Baby Food Action Network, 2006; Merewood et al., 2010; Phillip et al., 2001).

Even the voluntary Baby-Friendly Hospital Initiative has been slow to gain traction in the United States. Although there are currently more than 20,000 designated Baby-Friendly hospitals worldwide (WHO, 2011), only 102 are in this country (Baby-Friendly USA, 2010). To earn the designation, hospitals must take certain steps to support breastfeeding, which include helping mothers establish breastfeeding within the

first hour after birth, allowing mothers and infants to stay in the same room 24 hours per day, declining free formula offered to the hospital and refusing to give out formula sample packs to new parents (Baby-Friendly USA, 2010). The financial and other ramifications of declining free company-provided formula and refusing to distribute formula sample packs have been cited as a major barrier to U.S. hospitals' willingness to pursue Baby-Friendly designation (Turner-Maffei, 2004).

This lack of action on the part of governments, hospitals and formula companies, however, does not reflect a lack of interest in the issue. Many U.S. health and public advocacy groups have called for tightened regulation and more ethical practices by formula companies and the medical community with regard to formula promotion. The American Academy of Pediatrics and the CDC have issued statements discouraging certain formula marketing practices, including the distribution of formula sample packs or other promotional materials in hospitals and doctors' offices (Gartner et al., 2005; Shealy et al., 2005). The Office of the Surgeon General identified formula marketing as a barrier to breastfeeding success in its HHS Blueprint for Action on Breastfeeding (DHHS, 2000). Groups such as the U.S. Breastfeeding Committee, the National Alliance for Breastfeeding Advocacy and Ban the Bags have lobbied against certain formula marketing practices (see <http://www.usbreastfeeding.org>, <http://www.naba-breastfeeding.org> and www.banthebags.org).

Although these efforts have not resulted in any federal actions, one state (Massachusetts) and some public hospital systems (including those in Portland, Oregon and New York City) have adopted policies to curb the distribution of formula sample packs in hospitals (Massachusetts Breastfeeding Coalition, 2007; Smith, 2006;

Snyderman and Barber, 2007). Massachusetts has the most far-reaching legislative language on this issue at the state level; while the state does not ban hospitals from distributing free formula, its hospital licensure laws do require that formula samples be given only with a doctor's prescription or upon the mother's request (Massachusetts Breastfeeding Coalition, 2007).

JUSTIFICATION OF STUDY

Aggressive formula marketing practices may represent a significant barrier to achieving national breastfeeding goals. The promotion of formula to consumers in health care settings is particularly problematic, because it represents an abuse of patients' trust in their health care providers and has been shown to negatively affect breastfeeding behavior. Given the many demonstrated benefits of breastfeeding and risks of formula use, providers have an obligation to encourage breastfeeding according to domestic and international recommendations. Unfortunately, many health care providers today are complicit in helping formula makers market their products by distributing formula sample packs, coupons and other materials provided by formula companies in hospitals, prenatal care offices and pediatric offices.

The United States has made little effort to address these concerns through regulation of formula marketing practices. While one state, Massachusetts, restricts the distribution of formula sample packs in hospitals and some hospital systems have voluntarily discontinued this practice, formula marketing persists in a majority of U.S. hospitals and likely in many physicians' offices and other settings.

The tensions surrounding formula marketing in the health care setting have attracted some media coverage. Most of this coverage has consisted of articles and editorials on controversies that ensue when hospitals decide to stop distributing formula sample packs, or when governments consider restricting sample pack distribution (see, for example, Mintz, 2005; Snyderman and Barber, 2007; Zajfe, 2007). In 2005, a flurry

of articles brought the issue briefly to the national stage when Massachusetts banned hospitals from automatically distributing formula sample packs to all mothers (Lindsay, 2005; Smith, 2006). Other articles have included reports on scientific studies about formula sample pack distribution (Cliff, 2008; Shelton, 2008), and op-eds and first-person accounts have raised questions about the practice (Fink, 2006; Kratz, 2002). By and large, however, much of the media coverage on these issues has been dominated by editorials and opinion columns, which address the issues only superficially and with little context or analysis. Furthermore, although news database searches are imperfect, I have been able to find very little coverage of formula marketing in health care settings focusing on anything other than hospital distribution of formula sample packs. Therefore, I believe an in-depth journalistic investigation of formula marketing practices in the health care setting is needed to raise awareness about this issue and contribute to a more informed public discourse.

RESEARCH QUESTIONS AND METHODS

The purpose of this thesis is to shed light on baby formula marketing practices in which health care providers help promote formula to consumers. The thesis addresses the following research questions:

1. What methods do formula companies use to market to consumers through health care providers and in health care settings? How common are these practices?
2. Why do health care providers participate in formula marketing despite recommendations to the contrary?
3. What are breastfeeding advocates and hospital and public policy makers doing to address these marketing practices within the medical community?

These questions are addressed in a series of three journalistic articles. The first provides an overview of the issue and describes advocates' efforts to eliminate formula marketing in health care settings. The second focuses on the role of health care providers and their motivations in either distributing formula marketing materials or stopping the practice. The third focuses on the motivations of consumers in supporting, protesting or ignoring advocates' efforts to pressure health care providers to stop distributing formula marketing materials. To develop these articles, I conducted recorded interviews, in person when feasible and on the phone or via email when not, with obstetricians, a pediatrician,

nurses, mothers, breastfeeding advocates and experts and formula company representatives. See “Interviews,” below, for a complete list.

The primary limitation of this project is that it focuses on formula marketing practices in the eastern United States. Because the major formula companies are large, multinational corporations and low breastfeeding rates are a worldwide concern, formula marketing is an important global issue. Most of the people interviewed for the stories were from either North Carolina or Massachusetts, so their experiences may not reflect the situation across the entire United States. In addition, formula marketing has different implications in the United States than it does in other developed countries, and raises still other issues in developing countries, where use of formula can be particularly hazardous if powdered formula is mixed with unsanitary water. While a broader investigation of marketing practices across the United States and the world might be a worthy endeavor, this project focuses on the situation in the eastern United States alone.

Another limitation is that formula marketing in the health care setting is only one of many potentially problematic marketing practices formula companies employ. Companies have also been criticized for presenting an idealized or misleading image of bottle feeding in advertisements and for mailing families free formula samples timed to arrive just after the birth of their baby (Walker, 2001; WHO, 1981). Although such practices might negatively affect breastfeeding behavior, this thesis focuses on marketing practices that directly involve the relationship between patients and their health care providers.

THE SALESMAN WILL SEE YOU NOW

Advocates fight commercial gifts in health care.

More than 4 million babies will be born in the United States this year. Bundled in tiny caps and blankets, they will emerge from the hospital ready to experience for the first time the sight of sunlight or the feel of rain. By the time they are buckled in for the drive home, most will have already received their first advertisement from a large multinational corporation.

At more than 70 percent of U.S. hospitals, maternity staff give families goodie bags of baby formula samples, coupons and branded merchandise to take home with their new infants. Many nurses and doctors see the gifts as a nice way to congratulate new parents. But for some breastfeeding advocates, the bags represent an unethical partnership between hospitals and formula makers that takes advantage of patients' trust in their health care providers for commercial gain.

"It's using that health care facility as the middleman marketer," said Dr. Barbara Philipp, a pediatrician who led an effort to get rid of formula gift bags at Boston Medical Center in Massachusetts. "There's an implicit suggestion there that the doctor, or the nurse, or the hospital promotes one, formula, and two, that particular brand. I think it's unethical."

Most people love free samples. But should new parents be getting formula freebies not just in the mail or at Babies “R” Us—but also from their health care providers?

It actually starts while the baby is still *in utero*, with some obstetricians handing women, barely visibly pregnant, formula samples at their first visit. Others get a “hospital travel bag” sponsored by a formula company as their due date approaches. The handouts continue through the child’s first year, with pediatricians dispensing formula samples and gifts tailored to the child’s age—all courtesy of formula makers.

“I think the consumers should be outraged” that their doctors are participating in this sort of marketing, said Philipp. Philipp is one of many breastfeeding advocates and health care professionals pushing for removal of baby formula marketing from hospitals and doctors’ offices.

First, opponents to formula marketing say doctors shouldn’t promote anything but health. Second, opponents say providers should promote breastfeeding in accordance with recommendations of the American Academy of Pediatrics, and that handing out formula samples undermines the breastfeeding message. Third, even if families use formula, samples from doctors and nurses encourage parents to needlessly buy name-brand formulas instead of generics.

“It’s just doing a disservice all the way around,” said Amber Newcomb, a nurse at Johnston Medical Center in Smithfield, N.C., who recently threw out all the formula gift bags at her hospital. “We’re giving our parents a wrong impression and information by pushing Enfamil or Similac. We’re making them spend more money they don’t need to spend. That’s just not fair to the consumer.”

Research shows formula marketing in health care settings affects consumer behavior. A review conducted by the Government Accountability Office found a majority of studies showed lower breastfeeding rates among women who receive formula samples at hospital discharge. In one study, women who received formula marketing materials from their obstetricians during pregnancy were five times more likely to stop breastfeeding before leaving the hospital than women who received noncommercial infant feeding information.

Medical professional societies urge providers to be cautious about promoting commercial interests to patients; some guidelines specifically discourage distributing formula samples. But despite all this—and despite decades of efforts by breastfeeding advocates—formula marketing persists in U.S. hospitals, obstetric offices and pediatric offices.

The Cost of Formula

The image of a baby clutching its bottle is by now so pervasive that it seems as natural as a baby crawling or sucking its thumb. But just because formula is common doesn't mean it's harmless, said Marsha Walker, a nurse and director of the National Alliance for Breastfeeding Advocacy. "If a mother is going to formula feed a baby, she's got to understand what it's going to cost," said Walker. "Not only is it going to be costly on the grocery bill, it's going to be costly on that baby's health."

Families who bottle feed spend \$1,000 to \$1,500 on formula in the baby's first year, more if they're using name-brand or specialty formulas. But what really concerns breastfeeding advocates is that formula-fed babies have an increased risk of ear

infections, stomach ailments, respiratory infections, diabetes, obesity and other conditions compared to breastfed babies. A 2010 study calculated that 900 lives and \$13 billion would be saved annually if 90 percent of U.S. families breastfed their babies following American Academy of Pediatrics recommendations. Current recommendations state that babies should be fed only breast milk for the first six months, with continued breastfeeding (along with solid foods) at least until the baby's first birthday.

For decades public health officials in the United States have been trying to encourage breastfeeding. But while three-quarters of women start out breastfeeding, only 13 percent do so exclusively for the first six months, as doctors recommend. Many factors influence a woman's choice about whether or not to breastfeed, including cultural attitudes, convenience and concerns about returning to work, among others.

"If you look at the ethics that underlie any health care practice, the first one is non-maleficence—first, do no harm," said Walker. "Handing out these bottles of formula is potentially harmful to that baby." Distributing samples at the hospital or doctor's office makes parents more likely to use formula and thus deprives babies of breast milk that they might otherwise have gotten, opponents say. "Their health providers think they're giving them a gift, when in essence, the health providers are acting as an unpaid salesperson," said Walker. "[Providers] are letting down mothers every day because they do not speak up."

Gifts Ingrained in Patient Care

Many providers don't speak out against formula freebies simply because neither they nor their patients see the gifts as marketing. Formula samples have been given out in

hospitals for so long—at least since the 1960s—that many don’t give them a second thought. In addition, formula company-provided gift bags are often stuffed with booklets on pregnancy or infant care along with formula samples and coupons, so it’s easy to view them as educational rather than promotional.

“I’m sure every doctor’s office gets these little gift bags,” said Jessica Ramirez-Trower, a midwife in Cary, N.C., whose practice often gives Enfamil-sponsored gifts to pregnant patients. “The office manager says we’ve been getting them for years.” Ramirez-Trower acknowledged the formula samples could send a mixed message for women planning to breastfeed, but she said the pregnancy information in the gift bags is a useful resource.

“You kind of have to take the good with the bad,” said Ramirez-Trower. The pregnancy planners in her office’s Enfamil gift bags feature high-quality ultrasound pictures that show mothers how babies develop in the womb. “They’re getting educated because it’s so cool to see these amazing three-dimensional and four-dimensional pictures...they really keep the patient informed so she feels really in tune with her pregnancy.” Courtney Holmes, a mother of two in Raleigh, N.C., said the Similac gift bag she got after each of her children’s births was a great resource: “There was a lot of good information in it. I think that all moms need that, especially first-time moms.”

Now that she’s pregnant herself, midwife Ramirez-Trower said she’s more aware of the formula advertising that expectant moms encounter, and she’s begun to question the wisdom of handing out Enfamil samples to patients. She said she typically advises breastfeeding moms to donate or throw away the samples and enjoy the other goodies and information in the bag.

But it can be difficult for some mothers to simply ignore the samples and advertisements in formula gift bags. When Courtney Holmes took her first baby, J.D., home from the hospital five years ago, she was planning to breastfeed him. After J.D. cried through the entire first night, she relented and gave him one of the Similac samples from the hospital's gift bag. He slept for three hours, and the family soon switched to formula full-time. Though Holmes is comfortable with her feeding choices, her story is exactly what breastfeeding advocates want to prevent. When a mother feeds her baby formula instead of breast milk, the mother's milk supply can decrease. The less you breastfeed, the less milk you make; as a result, the more you use formula, the more you come to depend on it.

It's that pattern that makes handing out formula samples such an effective marketing tool, said Dr. Miriam Lobbok, a breastfeeding researcher and director of the Carolina Global Breastfeeding Institute at the University of North Carolina at Chapel Hill. "The marketing remains very similar to addictive things—if we can get you to use it once, we know we've got you. They use the same tactics that used to be used by the tobacco industry. Handing out free samples—'Just try it, it's easier, it's pleasant, it's lifestyle, it's got nothing to do with health.' And they're getting away with it."

Chris Perille, a spokesman for the maker of Enfamil baby formulas, Mead Johnson & Company, called that "an irresponsible analogy." Perille wrote in an e-mail that "Mead Johnson is committed to supporting breastfeeding—for instance, the front label of our Enfamil formula for infants 0-3 months (when breastfeeding rates are highest) includes a highlight box that says 'Experts agree breastfeeding is best'—and we've never seen any evidence that our marketing efforts discourage that practice."

Representatives from the other major formula brands, Similac and Gerber Good Start, did not respond to interview requests.

Others contend that evidence shows formula marketing discourages breastfeeding, despite disclaimers on formula packaging declaring “breastfeeding is best.” “That’s simple PR—always praise the competitor,” said breastfeeding advocate Marsha Walker. “It makes you look good, but in essence it means nothing. [Formula companies] are the major competitor of breastfeeding.”

But formula companies are in the business of selling a product; health care providers, on the other hand, have no place promoting products, critics say—particularly one that undermines a healthful behavior like breastfeeding. “You walk onto a cardiac unit, you do not see the nurses and the doctors there handing out coupons for Big Macs,” said Walker. Labbok, who trained as a physician before becoming a breastfeeding researcher, said, “Giving out anything from a facility or from a health care worker sends a very specific message. It’s our responsibility to our patients and to ourselves to do what’s best for the patients.”

Formula companies have worked hard to develop relationships with health care providers, and those relationships can undermine providers’ responsibilities to patients, said Walker, who monitors formula company activities for her organization, the National Alliance for Breastfeeding Advocacy. Companies often shell out cash for training grants, educational seminars and conferences for health care providers and medical students. Several providers interviewed for this story said they had received books, calendars and other logo-bearing gifts from formula companies; one pediatrician received stashes of free formula for her personal use. Most hospitals in the United States get all the free

formula that they need from formula companies to feed their infants, along with bottles, nipples and other equipment. All of these perks, said Walker, create a sense of goodwill and a financial dependency on formula companies: “What you get is loyalty on the part of the hospital and the health care provider to that formula company, rather than to the patient.”

Bucking the System

Dr. Barbara Philipp is one pediatrician who knows exactly where her loyalty lies. Now the medical director at Boston Medical Center’s Birth Place, Philipp worked for years to sever her hospital’s ties to formula companies. Today, the hospital doesn’t accept any free formula or supplies—either for use in the hospital or to give to patients.

Philipp’s crusade started when she attended a breastfeeding conference in Florida more than 10 years ago. She had young children at the time, and she went to the conference, she admits, mostly because it seemed like a good opportunity to grab a few days of peace and quiet. But the speakers opened her eyes to how maternity care in the hospital can make or break a woman’s chances of breastfeeding successfully. Back at Boston Medical Center, she saw how staff were failing to prepare patients for breastfeeding success. She decided the formula freebies had to go.

“We take care of extremely poor women here—women in shelters, teenagers, women with drug addiction. They don’t have access to the Internet, they can’t demand the best of care. So it’s really up to us to do it right, and we weren’t doing it right at all,” Philipp said. She gathered a group of doctors, nurses and midwives, and together they convinced the hospital’s administration to start paying for formula, rather than accepting

it for free. The group turned the patient gift bags away at the loading dock, and they restructured hospital routines to give mothers the breastfeeding support that they needed. “Now it’s a great feeling that [our patients] are getting really great care,” said Philipp.

Similar stories are playing out in other hospitals. Amber Newcomb, a nurse at Johnston Medical Center in Smithfield, N.C., tossed out all the Enfamil and Similac gift bags at her hospital in a single day last November. She called a meeting with the hospital’s chief operating officer and all the lead maternity nurses, and floated the idea of getting rid of the bags. When the group gave her the green light, she didn’t hesitate: “I took them off the template so the nursery couldn’t order them. I took them off the shelves that day. That was it. We just did it cold turkey,” said Newcomb.

Though Newcomb said one of her formula representatives has put up some resistance—even stopping by to drop off new formula freebies when Newcomb wasn’t around—the hospital has received no complaints from its staff or patients. Nurses now distribute a new gift bag, with most of the contents provided for free by non-profit children’s health organizations. The bags cost the hospital just 68 cents apiece.

Some have called for government action to help bolster the efforts of individuals like Philipp and Newcomb. Many advocates urge the U.S. government to enforce the International Code of Marketing of Breast Milk Substitutes, a World Health Organization resolution that provides guidance for ethical formula marketing. The Code prohibits direct marketing to consumers, including marketing through free samples. It is nonbinding, however, and enforcement is carried out entirely through the actions of individual country governments. To date, more than 100 countries have passed laws

based on the Code, but there are no regulations to enforce the Code's recommendations in the United States.

Marsha Walker, of the National Alliance for Breastfeeding Advocacy, has petitioned the Federal Trade Commission to take formula companies to account for what she calls deceptive advertising; so far, the Commission has taken no action in response to her requests. One recent development celebrated by breastfeeding advocates was a "Call to Action to Support Breastfeeding," issued this January by U.S. Surgeon General Dr. Regina Benjamin. Though not an enforceable document, it includes a recommendation to "ensure that health care clinicians do not serve as advertisers for infant formula," by avoiding the distribution of formula samples and other gifts in health care settings.

Getting the government to take enforceable, legal action to curb formula marketing in health care facilities has proved an uphill battle for advocates. Raising awareness of the issue among health care providers, on the other hand, seems to be making headway. "We're getting more organized," said Philipp, who remains active in the breastfeeding advocacy community, though her own hospital is now free of formula gifts. "I always thought the formula companies had a leg up on us because they were so organized. They met, they were communicating with each other, and we were all these little tiny camps trying to fight against this big force. But now, especially with the Internet, we're all talking to each other."

Breastfeeding advocates are joining forces through a national campaign called Ban the Bags. The organization offers resources for providers and consumers interested in getting rid of formula gift bags and keeps a list of all the hospitals that have "banned

the bags.” To date, the list is nearly 500 hospitals long—a number that keeps growing as health care facilities change the way they do business with formula companies.

“We’ve had quite a bit of success, I think,” said Walker, co-director of the Ban the Bags campaign. But there are still more than 2,700 hospitals in the United States left to go—and countless small clinics and doctors’ offices.

This story is the first in a series focusing on baby formula marketing in health care settings. The second examines the motivations of health care providers who distribute formula marketing materials to patients. The third and final story looks at consumers’ attitudes toward formula marketing.

FORMULA FREEBIES PERSIST, DESPITE CLAIMS THEY'RE UNETHICAL

What makes good doctors do something potentially bad for patients' health?

Dr. Keri Fitzsimmons, a bubbly pediatrician with a cascade of dark curls, has just the right demeanor to turn a trip to the doctor with a sick child into a cheerful affair. Dr. Alison Stuebe, a lanky and energetic obstetrician, exudes the kind of confident, wheels-always-turning focus you want in the person about to deliver your baby. And they're both mothers of three. In other words, two docs you wouldn't mind trusting with the health and well-being of your offspring.

But there's a key difference. While Fitzsimmons occasionally ventures into the supply closet in her office to grab a free can of baby formula for a new parent, Stuebe has spent nearly a decade waging war on just that practice.

Fitzsimmons, like many doctors and nurses, doesn't see much harm in handing out formula samples. Company reps drop them off at the office, and staff pass them on to patients who can use an extra can. "I feel pretty comfortable with it," said Fitzsimmons. "I think most of the time it's when families are in a lurch, or it's a backup can that just sits in their closet. But I don't feel like we're really having a long-term influence on families."

But Stuebe contends that there is a long-term influence, and an ethical problem, too. "When we recommend exclusive breastfeeding and then give mom a bag of formula

samples, we're inherently contradicting ourselves," said Stuebe. "The onus is on the health care system to sit up and realize that this is not appropriate." Stuebe has poured her passion for this issue into organizing protests, meeting with legislators and spearheading campaigns to stop hospitals from giving formula samples.

What led these two doctors to such different conclusions about a little freebie?

Fitzsimmons and Stuebe both consider themselves strongly pro-breastfeeding. As doctors, they want the healthiest outcomes for patients. For the vast majority of children and mothers, according to the American Academy of Pediatrics, that means breast milk—not formula—for the first year of life. A large body of research has shown that formula-fed babies face a higher risk for ear infections, diarrhea, diabetes and obesity, among other conditions.

But the clever tentacles of marketing have wound their way into the health care system. Some say even giving out the occasional sample, as Fitzsimmons does, turns health care providers—even those who encourage breastfeeding—into unwitting salespeople for the baby formula industry.

Moms and moms-to-be encounter formula ads early and often. Some are handed gift bags full of formula coupons and samples by their obstetricians months before the baby is born. After birth, more than 70 percent of U.S. hospitals give new families diaper bags containing formula samples, coupons and branded merchandise to take home with their newborns. And pediatricians like Fitzsimmons commonly have samples on hand for new parents to try out.

An Ethical Breach

To some, it's crystal clear. Health care providers who hand out formula freebies act unethically by helping to promote a product that's against patients' best interests. "These marketing tools are really powerful, and when physicians participate in this, they are actively undermining what we all recommend," said Stuebe. "We are literally saying congratulations, you trained for a marathon. Let me kick you in the ankle before you start running—hope you do well."

Marsha Walker, a nurse and lactation consultant who directs the National Alliance for Breastfeeding Advocacy, said handing out materials that promote formula violates a doctor's promise to "do no harm," because using formula carries increased health risks for babies. "Providers need to understand that the practice is unethical and that it can cause potential harm to their patients," said Walker. She likens it to a cardiologist handing out coupons for Big Macs.

"Mothers are much more likely to use the formula if it's recommended by their health care provider rather than by a commercial, where they know it's an ad, they can see the ad," said Walker. "When it's given to them by their health care provider, that just validates that it's an okay thing to do and that the health care provider really doesn't value breastfeeding that much."

Surveys and experiments back this up: women who get formula marketing materials from a health care provider are more likely to supplement breastfeeding with formula, and ultimately quit breastfeeding sooner. Besides the doctor's implied endorsement, simply having samples in the house during those first sleep-deprived nights with a new baby can affect parents' feeding choices.

“It’s very easy when a baby is crying and difficult to soothe to pick up the sample that’s right at hand, versus making more of a conscious decision, ‘Okay, now I have to go to the grocery store, I have to buy it,’” said Dr. Joshua Hardison, a Chapel Hill obstetrician whose practice stopped distributing formula samples a couple years ago.

And unlike trying out those mini-packets of Tide that come in the mail, using a formula sample is not a benign act, experts say. Using formula for just a few feedings can start a physiologic spiral that ultimately causes a mother’s milk to dry up. After that, she’s hooked on formula for the rest of the baby’s first year.

In addition to the health risks of feeding a baby formula, using formula can carry steep financial costs. Even if parents have already switched to formula, or plan to use formula from the get-go, getting samples from the doctor’s office can change parents’ buying habits, opponents say. That’s because the freebies are always brand-name—Similac, Enfamil, and Gerber Good Start are the big three—and although parents can switch to generics at any time, many stick with whatever brand their doctors gave them and just swallow the extra cost.

By overlooking the health and financial ramifications of giving out samples, opponents say, providers fail to honor their end of the doctor-patient relationship. “When we give them a sample that’s telling them to go spend extra money on a product that we are implicitly endorsing...that’s being a used car salesman,” said Stuebe. “That’s not being a doctor or a nurse.”

Industry Ties

Breastfeeding advocates say doctors and nurses who hand out formula goodie bags are participating in a complex I'll-scratch-your-back-you-scratch-mine relationship between health care and industry, which benefits providers and companies at the expense of patients' health.

Hospitals buy the mashed potatoes, Jell-O, and everything else that appears on patients' dinner trays, and pass the costs on to patients or their insurance companies. But the formula fed to babies in the nursery? Typically, it comes to the hospital free of charge from the formula maker. According to Marsha Walker, whose organization, the National Alliance for Breastfeeding Advocacy, has tracked formula company activities since the mid-1990s, companies also supply free nipples and bottles, meals for staff, and educational grants or seminars for doctors and residents.

"The formula companies give, and give, and give," said Walker. "And then in return, the hospital has got to give something back. And what they do is they give these companies access to their patients for marketing purposes."

The same pattern plays out in the medical office where doctors and nurses are plied with gifts, training and grants. A court case in the mid-1990s made public a few revealing lines from a formula company training manual. The manual, for employees at Ross Laboratories, maker of Similac brand formula, advised: "Never underestimate the importance of nurses. If they are sold and serviced properly, they can be strong allies. A nurse who supports Ross is like an extra salesperson."

Interviews with health care professionals suggest that many are indeed "sold and serviced" by formula company representatives. "They would come up to the floor, they

would bring lunch, they would bring dinner, they would bring theater tickets,” said Stuebe. “When nurses had a baby, the rep would send them ready-to-eat bottles for the entire first year of life for free.”

Fitzsimmons, the Chapel Hill pediatrician comfortable giving formula samples to patients, recalls formula reps as familiar faces during her residency. Several companies sent free formula for her own pantry after reps noticed that she was pregnant.

Companies start early with doctors and nurses by sponsoring conferences and offering free books to medical and nursing students, said Stuebe, who still has a pediatrics book from her medical school years bearing a formula company logo on the front. Those logos, plastered on pens, mugs, calendars, name badge holders and other trinkets, are never far from a provider’s gaze. “The health care system has really been worked on for years,” said Stuebe.

The relationship between health care providers and pharmaceutical companies has come under greater scrutiny in recent years, and hospitals are beginning to restrict company representatives’ access to health workers. But the history won’t disappear overnight. “This [marketing] becomes part of the health provider’s culture,” said Walker. “And [providers] don’t understand, or they’re denying, why this is happening.”

Cognitive Dissonance

Doctors and nurses are smart people, professionals. If research shows handing out formula samples is bad for breastfeeding and many providers do it anyway, are they all experiencing some kind of mass denial? Some say there’s a mind game at play here that psychologists call cognitive dissonance. It’s the brain’s effort to reconcile two

contradictory thoughts, and it's a powerful force that can make smart people do otherwise inexplicable things.

Benjamin Franklin starred in one of the most famous demonstrations of cognitive dissonance. Once, trying to ingratiate himself to a political rival, Franklin asked the rival to lend him a rare book from his personal collection. The man politely obliged, the rivalry ended, and the two were friends ever after. The ploy was effective, the theory goes, because the man could not simultaneously oppose Franklin and do him a favor, so he had to reconcile the two competing thoughts. The man resolved the problem by considering Franklin a friend, for who would lend an enemy a valuable possession?

Replace Franklin with a formula company and his rival with modern health care providers, and it's an apt analogy. If you've been dispensing formula samples your whole medical career, it's difficult to accept the idea that you've been doing something wrong all these years. Dismissing such claims provides a much cleaner resolution. "You wind up with a situation where they either deny this, ignore it, or don't think that it has any impact," said Marsha Walker of the National Alliance for Breastfeeding Advocacy.

This dissonance also helps health care providers convince themselves that they aren't swayed by all the gifts companies bestow on them. "Many of these providers say, 'Oh, the expensive dinner that the formula company gave me doesn't affect my behavior,'" said Walker. "Well, we know it does. We know perfectly well that all of the gifts, all of the marketing, all of the schmoozing that is done between the formula company representative and the health care providers is a way of ingratiating themselves onto the unit of a hospital by gift-giving."

Stuebe, the obstetrician who has led campaigns against formula samples in hospitals, has seen this first hand: “I spoke to one nurse in Boston who said ‘Gosh, I never thought that that was marketing. I just thought Larry was being nice!’ And it didn’t occur to her that if she fed her kid Enfamil for the first year—or Similac, I can’t remember who Larry worked for—when mothers said ‘What kind of formula do you recommend?’ she was going to say, ‘Well, my kid used Similac, and it worked for me.’”

Deciding formula freebies are harmless is the easier resolution, in part, because the doctors and nurses see the positive aspects of the goodies, but not the negatives, said Stuebe. It’s fun to get gifts, and it feels good to give them out. But, Stuebe said, the providers don’t see the mom at 3 a.m. a few nights later, when she uses that free sample and starts derailing her best-laid breastfeeding plans, or when she goes to Target and buys the expensive name-brand formula instead of the generic because that’s what her doctor recommended.

It’s Complicated

Parents in the United States have a complicated relationship with breastfeeding, and doctors and nurses do, too. Formula was the norm for most of the second half of the 20th century; many health care providers were raised on it, and have raised their children on it. In 1970, only 25 percent of babies were breastfed at one week of age. Today, 75 percent start out with at least some breast milk, but most families start incorporating formula early on, and breastfeeding rates consistently fall short of national health goals.

For many providers, formula was ingrained in their medical training. “We had lessons and planned how to prepare formula, how to make formula, how to use formula,

how to take care of formula, how to modify formula,” recalled Dr. Miriam Labbok, a professor of public health at the University of North Carolina at Chapel Hill, of her medical training in the 1970s. “And we had not one single lecture on supporting breastfeeding.” Today, Labbok is an outspoken breastfeeding expert and advocate.

Even if providers know current breastfeeding recommendations, there’s a personal aspect of breastfeeding that can be hard to overcome. Stuebe counts herself lucky that she was able to breastfeed all three of her own children without a problem, but she recognizes that’s not the case for everybody. “You still have everybody’s personal stories, their personal baggage,” said Stuebe. “You can do a training, but you can’t undo people’s personal experience.”

For doctors, that personal experience can include seeing patients in heartbreaking situations of poverty or ill health. Formula is only one of many products in pediatrician Fitzsimmons’ supply closet, and she said it feels good to save patients time and money by giving them a free sample. “It’s nice for an economically disadvantaged person, to be able to provide that to them,” said Fitzsimmons.

Labbok has worked with impoverished women abroad and recognizes the temptation to give free formula to poor mothers. When you have a patient struggling to make ends meet, she said, you do what you can to help. If a patient is poor and is already using formula, what’s the harm in giving her a few free cans? “That is a conundrum,” said Labbok. “However, that’s not where most of the free formula is going.”

Indeed, most of it is going home with women who want to breastfeed, plan to breastfeed, but end up succumbing, one by one, to the pull of formula. That’s why Dr.

Alison Stuebe has made it her mission to stop health care providers from setting their patients up for breastfeeding failure with its attendant health and financial costs.

“Every mom and baby deserve to be able to breastfeed, and the marketing of infant formula in health care settings is one incredibly concrete way that we undermine that,” said Stuebe. “The health care system needs to step back and realize the role that they’re playing.”

This story is the second in a series focusing on baby formula marketing in health care settings. The first examines advocates’ efforts to stop the distribution of formula sample packs in hospitals. The third and final story looks at consumers’ attitudes toward formula marketing.

WHERE'S THE OUTRAGE?

Advocates find consumers ambivalent on baby formula gifts.

It was a Friday around dinnertime when Courtney Holmes of Raleigh, N.C., took her newborn son J.D. home from the hospital. Saturday morning, her husband found her desperately rocking the wailing baby, tears streaming down both their faces. She'd been up all night trying to soothe little J.D.

Holmes' mother, Cheryl Dresser, came over to help. The first thing Dresser said was, "I want formula, I want a bottle, and I want a pacifier." Holmes hesitated. She had read that breastfeeding was best for babies, and she planned to breastfeed J.D. "I wanted to try it—I knew that's what I wanted to do," Holmes said. "I wanted to do what was best for our kids." She had started breastfeeding at the hospital, and she hadn't bought a single can of formula.

Then she remembered the gift bag the nurse at the hospital had given her just before she left with J.D. In it were a few samples of Similac baby formula. Her mother mixed a bottle and gave it to the crying baby. "He slept for a solid three hours," recalled Holmes. "I was like, okay, formula it is! We ended up with formula, and both my kids have been happy formula babies."

Holmes has no regrets about not breastfeeding her two children, and for her, the hospital's gift bag was a convenient fallback in a tough moment. But stories like hers

outrage many breastfeeding advocates, nurses and doctors, who say formula gift bags sabotage women's chances of achieving their breastfeeding goals.

Emily Taylor, programs director at the Carolina Global Breastfeeding Institute at the University of North Carolina at Chapel Hill, works to stop hospitals from distributing baby formula samples to new mothers like Holmes. "It's very, very clear that this practice is bad for moms, it's bad for babies, and that health care providers should have no involvement whatsoever in the practice," said Taylor.

She and other advocates say health care providers should promote breastfeeding—the most healthful option for feeding infants and the one recommended by the American Academy of Pediatrics—rather than distributing formula gift bags. Advocates say mothers who have trouble breastfeeding should get access to lactation consultants and other resources from their providers, rather than being showered with formula samples, coupons and logo-bearing gifts.

Taylor says she believes obstetricians, nurses and pediatricians who give formula company-sponsored freebies to patients "are complicit in a series of actions that take place to cause harm to mothers and babies." Research has shown that mothers receiving formula marketing materials from health care providers stop breastfeeding sooner. That puts their children at elevated risk for ear infections, stomach ailments, diabetes and obesity, which occur at higher rates in formula-fed babies than in breastfed babies.

A national campaign called Ban the Bags encourages hospitals to voluntarily stop distributing formula gift bags to patients. Although nearly 500 hospitals have "banned the bags," according to the organization's website, formula marketing materials remain common in at least 70 percent of U.S. hospitals and many doctors' offices.

Calls for Consumer Activism

Breastfeeding advocates say they believe many mothers' breastfeeding plans were derailed, at least in part, by receiving formula samples from a health care provider. They urge those mothers to speak out. "I think that consumers have a responsibility," said Taylor. "Those moms who know that that formula [gift bag] set them up...they need to go back and tell their doctors, 'Remember that bag you gave me? This is what ended up happening and now I feel bad about that happening. You know maybe you should think about that for the moms that you work with in the future.'"

Dr. Alison Stuebe, an obstetrician who manages the Ban the Bags blog, said consumer activism could make providers reconsider handing out formula bags: "If moms turn around and say, 'Why are you doing this? I don't want your bag, I don't want you marketing formula to me'—that on a local level or on a regional level can really change practice."

Rather than coming out in droves against formula marketing in hospitals and doctors' offices, though, many consumers are ambivalent. Some have come to expect and enjoy formula gift bags and protest when hospitals decide to stop distributing them. Based on her experience, which she considers a positive one, Courtney Holmes said she would hate to see hospitals deny parents the bags.

Dr. Barbara Philipp, a pediatrician and medical director at Boston Medical Center's Birth Place, said she would like to see consumers speak out against the bags, but understands that it might be a lot to ask of new parents: "I think the consumers should be outraged—they should be absolutely outraged. But they just don't know. It comes at a

time when there's so much stress in a family's life...who has time with a brand new baby to be writing letters to a hospital about this issue?"

Whether it's because of parents' lack of time, lack of motivation or real conviction that the bags are useful, advocates have had a tough time jump starting consumer activism to stop formula marketing in health care settings. Though a small number of parents can be found railing against formula gift bags on blogs and parenting websites—and a handful have even written letters complaining to their hospitals—the vast majority of the approximately 4 million women who give birth in the U.S. each year remain unmoved.

The Appeal of “Free”

In fact, some women are moved in the opposite direction—to actively seek out free formula gift bags. Full of goodies like bottle cooler packs and cute branded bibs, mothers find the bags hard to resist. Some mothers show up at the hospital in labor, toting gift bag certificates from companies' websites. Even those who plan to breastfeed sometimes seek out the bags.

“Who doesn't want something free and fun?” said breastfeeding advocate Emily Taylor. “Pregnancy has really become a consumer paradise where we want to buy every little thing and get every free gift that may give us a leg up in how to parent our children.”

Advocates caution, though, that the “free” bags actually come with a steep price tag. Not only do the bags send a message that discourages breastfeeding, they harm bottle-feeding families by leading them to spend extra money buying name-brand

formulas instead of generics. “A person who is making a logical economic decision would never buy premium brand formula when the generic was the same thing,” said obstetrician Dr. Alison Stuebe. “In order to get people to buy that much more expensive, branded formula, the formula companies needed an endorsement—and they knew they could get that if the mom got an Enfamil sample or a Similac sample from a health care provider.”

Courtney Holmes, the mother of two in Raleigh, N.C., said she can see why parents might interpret the formula gift bags as a doctor’s endorsement of that brand. “We ended up using Similac, because that’s what they gave us,” she said. “They’re the experts. Especially as a first-time parent, that’s what you have to go on.” The family fed their son Similac his first year; it wasn’t until they had their second child that they realized generics worked just as well, at a fraction of the cost.

Stuebe and other advocates calculated that formula gift bags ultimately cost families an extra \$700 in the first year of their baby’s life when parents stick with the brand that’s in the bag. “We make the case that you can buy some really nice diaper bags at Saks for \$700 and still come out ahead,” Stuebe said. “But there’s this sense that there’s this free gift that patients are getting and we’re taking it away from them.”

A Wolf in Sheep’s Clothing?

Tucked in among the cooler packs and other goodies in formula gift bags are free booklets about pregnancy, breastfeeding or infant nutrition. Because of these educational materials, many mothers and health care providers simply don’t perceive the bags as marketing, despite the logos on the bags and the samples and coupons inside.

Holmes said the formula gift bags she got at the hospital after each of her children's births seemed more like educational resources than advertisements. "I don't think it's pushy like some other advertising," she said. "I really think it's just informational." She said she believes parents who don't get such bags are at a disadvantage: "They don't get the proper information. They need to know everything that's out there to be able to make that educated decision on how they're going to feed their child."

But opponents contend that much of the information in the bags is misleading—even the materials about breastfeeding and infant nutrition. "This advertising is confusing moms about what the facts are, and when it does that...we are taking away their ability to make informed decisions," said Emily Taylor. Jessica Ramirez-Trower, a midwife in Cary, N.C., agreed. "The advertisements they do are absolutely excellent. When you read them, you get the message that it's like breast milk." But no formula on the market today offers the same health benefits as breastfeeding, health experts say.

Still, Ramirez-Trower keeps a stash of Enfamil gift bags in her office to give to patients. "We don't want to be pushy, we don't want to be judgmental," she said. "It's up to the patient to make the informed choice...as long as she knows what she's going for."

But do doctors need to give out formula gift bags to show they respect parents who bottle-feed their babies? Would taking away those bags support alienate formula-feeding parents? Breastfeeding advocates say they think such fears are misguided. "We don't give out samples in other wards of the hospital, of food or anything else," said Dr. Melissa Bartick, an internist at Cambridge Health Alliance and Harvard Medical School. "Hospitals are places for health and healing. They're not places to be sold stuff."

Taking a Stand

Bartick is a doctor and mother who has taken a stand in a big way—and proven that consumer activism can make a difference. Like Courtney Holmes, Bartick planned to breastfeed when she was pregnant with her first child, but had trouble with it. Her son was eating formula before he left the hospital; at home, Bartick fed him the formula samples she'd been given by the hospital staff.

When she got pregnant with her second child, she did what any good doctor would do: she looked at the science to see how she could make breastfeeding easier the second time. She said she discovered that her hospital had set her up for failure with a series of practices that undermine breastfeeding, such as keeping her son separated from her in the nursery, giving him a pacifier, failing to provide a lactation consultant early—and sending her home with formula samples.

Bartick's research made her better prepared for breastfeeding her second child, but it also made her angry that her first breastfeeding experience had been so unnecessarily difficult. "Because I'm a doctor, even though I'm not in the maternity field, I could see how much it was the health care system letting me down, and not my own fault," she said.

While on maternity leave with her second child, Bartick started writing letters about the need for better breastfeeding support in hospitals. She wrote to insurers, legislators—anyone who she thought could make a difference. "I just felt like nobody should have to go through what I went through to feed their baby," she said.

Her involvement in the issue quickly escalated, and within a year she was elected chair of the Massachusetts Breastfeeding Coalition, a position she still holds. Under her

leadership, the organization lobbied to ban formula sample bags under Massachusetts' hospital licensure regulations. Though that effort was unsuccessful, the group has helped convince dozens of the state's hospitals to voluntarily stop distributing the bags and worked to address many other breastfeeding issues in the state.

Bartick's own experience as a mother transformed her into an outspoken breastfeeding advocate; she said she believes others like her can motivate hospitals to change their practices. "Don't take the bags," she said. "Write a letter of complaint to the hospital. Hospitals listen to their customers."

Does writing letters and getting rid of formula bags in hospitals really make a difference? Midwife Jessica Ramirez-Trower says she believes some of the concern over formula gift bags is misplaced. In her mind, formula marketing isn't as influential as broader social issues, like cultural attitudes and acceptance of breastfeeding in public: "This doesn't have to change here with the bottles in the office, at the providers, at the hospitals," she said. "It has to change at Harris Teeter, it has to change at Olive Garden, it has to change on the airplane. It's the attitude around the woman in general."

But breastfeeding advocates see no reason to wait for a societal shift in attitudes toward breastfeeding before getting formula marketing out of hospitals and doctors' offices. "There are a number of obstacles to breastfeeding for moms in the United States," said Dr. Alison Stuebe. "This one is remarkably easy to fix."

This story is the third and final in a series focusing on baby formula marketing in health care settings. The first examines advocates' efforts to stop the distribution of formula

sample packs in hospitals. The second examines the motivations of health care providers who distribute formula marketing materials to patients.

REFLECTIONS AND CONCLUSIONS

In all of science, policy and culture, history begets the present. The story of breastfeeding in the United States is no exception. To understand the complex interplay between breastfeeding, formula marketing and health care today, I had to begin with an investigation of the development of the formula industry, the history of formula marketing practices and the evolution of scientific and cultural influences on infant feeding during the 20th century.

History provided an invaluable context for my conversations with advocates, providers and mothers, and I attempted to convey some of the elements of that history in the articles. For example, Dr. Miriam Labbok, who attended medical school in the 1970s, is a member of a generation of physicians trained, in her words, on “how to prepare formula, how to make formula, how to use formula, how to take care of formula, how to modify formula,” with “not one single lecture on supporting breastfeeding.” Although Labbok became a leading breastfeeding researcher and advocate, the description of her training offers a pointed explanation for why many providers practicing today are simply unprepared to support breastfeeding. The history of how providers have been courted by formula companies with gifts and grants also provides important context for the practices in health care today. So does the cultural history of formula in the United States, and the attitudes toward breastfeeding that have developed among people of various generations and backgrounds.

On the flip side, one of the most challenging aspects of developing this story was staying focused on the critical story elements—how formula is marketed in health care settings, why that marketing might be a problem and what is being done about it—while providing context to convey the full picture. Many other stories overlap with and influence the issue of formula marketing. One is the broader movement in U.S. hospitals to rein in commercial influence. Another is the constant push and pull between the interests of individuals and the interests of society, a common theme in public health stories. Efforts to support breastfeeding touch on fundamental tensions in this country. Is it appropriate for doctors to tell people what to eat or what to feed their children? Is it right for the government to restrict advertising for legal products?

Digging into any story involving breastfeeding, one quickly comes up against a tangle of cultural, political, scientific and ideological elements—enough to fill several books. Tying the most critical elements into journalistic articles, even articles of generous length, is necessarily an exercise in restraint. This experience has given me a deeper appreciation for challenges journalists face when investigating complex topics, boiling a story down to its key elements and then presenting it in ways that people want to hear. Completing this project has forced me to grow as a journalist, to dissect issues that are far from black and white and to ask the hard questions—not just who, what, when, and where, but *why* things are the way they are. It has been an intensely gratifying experience.

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