

## **Breastfeeding: Breastfeeding Advocacy**

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### **Formula for Profit: How Marketing Breastmilk Substitutes Undermines the Health of Babies**

**By Jennifer Coburn**

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Because of the strident societal and economic impact wielded by the formula industry, bottle-feeding has today become the social norm in the US. Fewer than half of all US babies are exclusively breastfed during their first day or two in the hospital.<sup>1</sup> By the time they are six months old, only 19 percent of US babies receive any breastmilk,<sup>2</sup> and only 2 percent of one year olds. Contrast this with the average age of weaning worldwide, which is 4.2 years. This country's societal hostility towards breastfeeding is such that many states have had to pass laws protecting a mother's right to breastfeed her child anywhere that she is otherwise permitted to be.

The very need for such legislation is a sad commentary on the lack of appreciation for the broad range of health, social, and environmental benefits of breastfeeding. Nevertheless, the slogan "breast is best" is no exaggeration. Breastmilk contains 400 nutrients that cannot be recreated in a laboratory, and several studies suggest that breastfeeding reduces the risk of sudden infant death syndrome.<sup>3,4,5</sup>

An absence of breastfeeding has been linked to an increased risk of hospitalization,<sup>6</sup> childhood cancer,<sup>7,8,9</sup> diarrheal diseases,<sup>10,11,12</sup> lower respiratory illness,<sup>13</sup> ear infections,<sup>14</sup> bacterial infections,<sup>15</sup> diabetes,<sup>16</sup> infant botulism,<sup>17</sup> Crohn's disease,<sup>18</sup> ulcerative colitis,<sup>19</sup> and even cavities.<sup>20</sup> In *Milk, Money and Madness: The Culture and Politics of Breastfeeding*, Naomi Baumslag, MD, MPH, asserts that breastfed babies also have lower incidence of allergies, urinary tract infections, obesity, learning, behavioral and psychological problems, later-life heart disease, pneumonia, neonatal sepsis, and giardia infection.<sup>21</sup>

Children are not the only ones who benefit from breastfeeding. Nursing mothers enjoy a reduced risk of premenopausal breast cancer,<sup>22</sup> ovarian cancer,<sup>23</sup> and osteoporosis.<sup>24</sup> Breastfeeding is advantageous for people who are outside the mother-baby unit, when you consider healthier babies mean lower health insurance premiums for everyone, and lower absenteeism among working parents. The production of formula, bottles, plastic nipples, and formula cans, not to mention cleaning artificial feeding supplies--all create pollution and in some cases hazardous waste. Finally, breastmilk is also free and convenient, considerations that should give pause to families faced with an average yearly cost of \$800 per baby if they choose to formula feed.

The economic implications of formula are certainly significant. The industry generates \$5 to \$6 billion in sales each year,<sup>25</sup> and its executives reap huge profits--the CEO of Abbott Labs earns more than \$4 million per year; his counterpart at Bristol-Myers Squibb (makers of Enfamil), nearly \$13 million. Part of the reason the industry is so profitable is the fact that every dollar formula makers charge their retail distributions outlets costs them a mere 16 cents on production and delivery.<sup>26</sup> Formula is, in short, big business--the result of a complex social marketing campaign that began half a century ago, one that has speciously managed to define artificial feeding as a convenient, liberating, and "modern" way of feeding one's infant.

## **Science Crushes Nature**

"At the beginning of the 20th century, basically women breastfed, had a wet nurse or their babies died," says Mary Lofton, spokesperson for La Leche League International (LLL). Insofar as artificial baby milk became available as a life-saving alternative to breastmilk, it was deemed a blessing. "The crucial social phenomenon," Lofton adds, "was the shift from home to hospital in childbirth.... Women were given anesthesia, babies were taken away, schedules were rigid, and all those interferences led to problems with breastfeeding."

Considering formula to be nutritionally equal to breastfeeding, doctors began recommending it to patients. Tangentially our society experienced a burgeoning captivation with science and technology, and became increasingly enamored with an efficiency-model of infant feeding and care. The advent of World War II encouraged women to work outside the home, which only furthered the reliance on artificial feeding. By the 1950s, infant formula gained the widespread endorsement of the pediatric community, and artificial feeding increasingly became seen as equal--if not superior--to nursing.

Marian Tompson, one of the founding mothers of LLLI, thinks the 1950s doctor acted out of ignorance. "I think anyone with half a brain would realize that human milk is species-specific," she says. "No one ever suggests that I feed my kittens with milk from the cocker spaniel next door." Nevertheless, with its decidedly scientific-sounding name, formula fit right into the landscape of an America mesmerized by the march of modernity, leisure, and ease. Measuring formula, sterilizing bottles, the modern mom became a domestic chemist. Bottle-feeding became a symbol of modern living, prosperity, and progress--indeed, healthful living! In contrast, breastfeeding took on the aspect of a primitive, retrograde thing to do.

## **The Role of the Medical Establishment**

The campaign to normalize artificial feeding gains a great deal of its effectiveness from an unholy alliance between the pharmaceutical industry and the medical establishment. To promote artificial feeding, formula manufacturers spend millions of dollars securing exclusive distribution deals for formula samples, at a yearly average of \$6,000 to \$8,000 per doctor. They donate \$1 million annually to the American Academy of Pediatrics in the form of a renewable grant that has already netted the AAP \$8 million. The formula industry also contributed at least \$3 million toward the building costs of the AAP headquarters.<sup>27</sup>

The American College of Obstetrics and Gynecology received \$548,000 from two of the four major formula makers in 1993. The American Medical Association television program is sponsored by the makers of Similac. Moreover, the American Dietetic Association, the National Association of Neonatal Nurses, and the Association of Women's Health, Obstetric and Neonatal Nurses all receive generous funding from the formula industry.<sup>28</sup> A 1994 study that was published in the *Journal of the American Medical Association* exposes the influence the formula industry wields over the medical establishment. "By giving physicians money," the authors found, "the [formula] companies are successful in influencing doctors to recommend their product."<sup>29</sup>

Formula manufacturers play hardball to get hospital business. Take the example of Canada, where Mead Johnson secured an exclusive contract with Toronto's Women's College Hospital that pays the hospital \$1 million the first year and \$350,000 per subsequent year for a decade. Abbott Labs and Bristol-Myers Squibb got into a bidding war over the right to promote formula through Grace Hospital in Vancouver, Canada's largest birthing facility. Ross Labs offered to pay the Doctor's Hospital in Canada \$1 million for a contract which would require that the hospital would give their product to all mothers in take home packages, supply

breastfeeding mothers with Ross's instructions on nursing, and make sure mothers had "access" to Ross architectural services for nurseries.<sup>30</sup>

Jack Newman, MD, author of *Dr. Jack Newman's Guide to Breastfeeding*, a book on the politics of formula use, characterizes the relationship between the pharmaceutical industry and medical establishment as bribery. From large donations to the "myriad of other little 'useful' items" such as pens, paper pads, measuring tape, growth charts, and coffee cups (all of which feature formula advertising), Newman considers these contributions wholly unethical.

Physical separation of hospital nurseries and maternity wards begin to erode the breastfeeding relationship right from the start. James McKenna, PhD, director of University of Notre Dame Mother-Infant Behavioral Sleep Laboratory, told me "Our studies of breastfeeding mother-baby pairs, where infants were about four months, reveal that proximity to mother, particularly the types of intimate contact that occur during bedsharing that permit the infant to smell its mother's milk, doubles the amount of breastfeeding episodes, and triples the amount of nightly breastfeeding time."

Perhaps the most coveted payoff for formula makers, however, is the opportunity to exclusively distribute their products through hospital maternity wards. When a mother is released from a hospital or birthing center, she is often given a discharge gift basket that includes free formula. Research shows this tacit endorsement on the hospital's part is so effective in establishing brand loyalty that 93 percent of mothers who artificially feed continue using the brand of formula given to them by the hospital.<sup>31</sup> Research suggests that exposure to formula advertising during pregnancy seriously undermines a future breastfeeding relationship.<sup>32</sup>

Even more egregious than subjecting a mother to a barrage of formula advertising is veiling formula marketing as a form of health service, as the Nestle corporation has done. In past decades the company deployed sales staff, posing as "milk nurses," to promote artificial feeding to mothers in developing nations,<sup>33</sup> compensating the sellers commensurate with the amount of artificial baby milk sold. To save money on the costly formula, mothers often diluted the mix. This on its own would have a deleterious, nutrition-depleting effect on the babies, but compounded with the lack of access to sterilized water, the use of formula in these countries led to many infant deaths. Formula use is still associated with the deaths of one and a half million children each year--both overseas and in the US.<sup>34</sup>

### **Ross Laboratories' Mother's Survey**

The formula industry's insistence on framing the debate on infant feeding even extends to their endeavor to collect and publish "national breastfeeding statistics." Barbara Heiser, executive director of the National Alliance for Breastfeeding Advocacy (NABA) says Ross Laboratories' role in tracking breastfeeding rates creates a conflict of interest. "We wouldn't ask the tobacco industry for statistics on lung cancer," she says. Daven Lee, a breastfeeding advocate and writer, says Ross is the only group that tracks national breastfeeding statistics--via a survey generated by their Marketing Department, and subsequently presented as unbiased research. "This way," Lee states, "Ross wins credibility and is cited as a resource in the media."

Clearly, Ross and other formula makers are competing not with each other, but with breastfeeding itself. In that light, breastfeeding mothers are caught in the crossfire. Heiser points out that mothers who purchase nursing pads often receive coupons for free formula. "Just recently a man was in renting a breast pump for his wife and he asked for two receipts because he could get a \$10.00 coupon for formula with every breast pump rental receipt he sent in" to the formula makers, she remarks, an irony that lactation consultant and childbirth educator Linda

Smith has also witnessed. "The breastfeeding mother gift packs companies give mothers," Smith says, "often contain breast pumps that are uncomfortable and usually ineffective--along with bra pads and formula samples. These are very popular with mothers and nurses." And, for a new mom, sleep-deprived, and struggling to meet her baby's needs, tempting.

Indeed, an interesting inverted rationale exists whereby formula feeding is considered by some to be a pro-woman, even feminist practice. By aligning themselves with the feminist ideal of flexibility--including the freedom to return to work or to pursue personal interests--formula was originally embraced by the feminist movement. Marion Tompson says since then, however, "We've seen a total turnaround." In fact, she says, as far back as 1975 attorneys for the National Organization for Women (NOW) successfully fought to eliminate inquiries about a mother's breastfeeding status from the unemployment eligibility questionnaire. Prior to this, a nursing mother's commitment to finding employment was questioned and benefits could be denied.

More recently, women's groups have fought for public breastfeeding laws, unpaid time off to pump breastmilk, insurance coverage for lactation specialists, and the Family and Medical Leave Act, which allows a new mother to take a 12-week maternity leave without threat of losing her job. Not all of these measures were approved, but feminists signed on to every effort. So although formula makers are trying to link arms with the feminist movement, the courtship is arguably one-sided. In reality, it is extraordinarily paternalistic to withhold information from mothers about the profound inferiority of artificial feeding. Feminist ideals demand informed choice.

### **The WHO Code**

The aggressive marketing of infant formula stands in direct conflict with the directives of the World Health Organization (WHO) and United Nations International Children's Education Fund (UNICEF), which jointly adopted an International Code of Marketing of Breastmilk Substitutes in 1981. The objective of the WHO Code is "to contribute to the provision of safe and adequate nutrition for infants, by the protection and promotion of breastfeeding and by the proper use of breastmilk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution."<sup>35</sup> The code carries ten main provisions:

No advertising of breastmilk substitutes

No free samples of breastmilk substitutes to mothers

No promotion of products through healthcare facilities

No company-appointed "nurses" to "advise" mothers

No gifts or personal samples to health workers

No words or pictures idealizing artificial feeding, including pictures of infants, on the labels of the products

Information to health workers should be scientific and factual

All information on artificial feeding, including the labels, should explain the benefits of breastfeeding and the costs and hazards associated with artificial feeding

Unsuitable products, such as sweetened condensed milk, should not be promoted for babies

All products should be of high quality and take into account the climatic and storage conditions of the country where they are used.<sup>36</sup>

Tompson, part of the group that drew up the guidelines in Switzerland, proposed that formula labels include health hazards of artificial feeding like the surgeon general's warning on cigarettes--a suggestion that the group, comprised of about 50 representatives of nongovernmental organizations (NGOs), as well as

executives from the formula industry, rejected. Yet Tompson still thinks warning labels are a good idea. "Today when you see an ad on television for a drug, a soft voice lists all of the contraindications...You don't hear that soft voice telling you all that can go wrong with formula," she adds. Nevertheless, the US' reluctance to sign onto the voluntary code--ten years after most other nations did--underscores the fact that, however well intended, the WHO Code is as toothless as the infants it aims to benefit.

### **The Baby-Friendly Hospital Initiative**

WHO and UNICEF have experienced greater breastfeeding promotion success with the Baby-Friendly Hospital Initiative (BFHI), established in 1991 to help hospitals and birthing centers create an environment that is conducive to breastfeeding. Resting on the foundation of the WHO Code and the Innocenti Declaration (a resolution prepared at an international breastfeeding conference for international policy makers in Innocenti, Italy, in 1990), the BFHI was drafted to encourage hospitals to educate mothers about the benefits of breastfeeding.

Although the ten criteria for baby-friendly status are easily attainable, the US lags behind: of 14,000 baby-friendly hospitals worldwide, only 23 are in the US, says Judy Lannon, project manager for the Baby-Friendly Hospital Initiative (BFHI). To earn this standing, a hospital "may not distribute gift packages to new mothers that contain formula" adds Lannon. The other requirements are that hospitals do the following:

Have a written breastfeeding policy that is routinely communicated to all healthcare staff

Train all healthcare staff in skills necessary to implement this policy

Help mothers initiate breastfeeding within an hour of birth

Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants

Give newborn infants no food or drink other than breastmilk, unless medically indicated

Practice "rooming in" by allowing mothers and infants to remain together 24 hours a day

Encourage breastfeeding on demand

Give no artificial teats, pacifiers, dummies, or soothers to breastfeeding infants

Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birthing center<sup>37</sup>

Seventy-five US hospitals are currently holding "certificates of intent," meaning they are preparing to be reviewed for BFHI status in the near future. Lannon says that if a hospital fails to meet the criteria the first time, they are given recommendations and urged to reapply. There is no limit on how many times a hospital may apply, she adds.

In other nations, the BFHI has led to tremendous breastfeeding successes. In Chile, only 4 percent of infants were exclusively breastfed in 1985. By 1991, less than one year after the BFHI was launched, the rate had risen to 25 percent.<sup>38</sup> Six years after Cuba adopted the BFHI, the rate of mothers who were breastfeeding at the time of hospital discharge jumped from 63 percent to 98 percent.<sup>39</sup> In Iran, it took only five years for the rate of exclusively breastfed infants to rise from 10 to 53 percent.<sup>40</sup> China experienced comparable success: 6,300 hospitals reached baby-friendly status by 1996, along with regulations on the marketing of formula. A 1994 survey found that in just two years, breastfeeding rates increased from 10 percent to 48 percent for infants in urban areas; it rose from 29 percent to 68 percent in rural areas.<sup>41</sup>

### **The Tobacco Connection**

The formula industry's marketing tactics have been likened to big tobacco

companies that give away free samples, and place their products in popular movies and television shows, while denying that their products are addictive. Likening formula marketing to tobacco marketing is an argument that gains credibility when one considers that 4,000 babies worldwide die every day because they are not breastfed.<sup>42, 43</sup> (According to the American Lung Association, 1,180 people die from smoking-related illnesses every day in the US.) Many Americans falsely believe that the alarming number of formula-related infant deaths is solely due to unsanitary water and overdilution in developing nations. But formula feeding increases babies' health risks everywhere. In the US, four of every 1,000 infants born die because they are not breastfed.<sup>44</sup> Healthcare savings would reach an estimated \$2 to \$4 billion annually if every child in the US were breastfed for as little as three months.<sup>45</sup>

Smith says that there are some similarities in marketing formula and tobacco, but she's not sure the two are parallel. A significant difference, she believes, is that there is a limited need for formula for some babies and mothers." In her work as a lactation consultant, Smith says she sees one case about every few years where "a loving and wonderful mother tries absolutely everything and she simply isn't able to breastfeed." Although formula does serve an important function for a small minority of children, it is clear that formula makers have every baby in their sights as they wage their aggressive marketing efforts. And the vast majority of mothers who experience insurmountable obstacles to breastfeeding have simply been failed by the medical establishment. Like prescription drugs, formula should be administered judiciously.

### **Formula Recalls**

Artificial milk's health risks to young children are only compounded by the frequent occurrence of product recalls, of which there were 22 "significant" ones between 1982 and 1994.<sup>46</sup> Seven of these were classified as Class I, potentially life threatening.<sup>47</sup> Salmonella contamination, vitamin deficiencies, and bacterial contamination were among the most serious health risks, with the presence of glass particles from bottle chipping among the less serious, but not negligible, offenses.

In 1999, 120,000 cans of Mead Johnson's ProSobee formula were recalled for labeling errors after a parent called the company to inquire why the product smelled strange. It was discovered that cans labeled as infant formula contained, in fact, Vanilla Sustacal--an adult nutritional supplement that, if consumed by infants, could lead to what the Mead Johnson Corporation itself calls "severe medical problems."<sup>48</sup> The formula in question was shipped to stores at least six months prior to the recall.

Nevertheless, Mead Johnson termed the recall an "extra precautionary" measure.<sup>49</sup> Wouldn't extra precaution be to have caught the labeling error before the formula left the factory and spent half a year on supermarket shelves? We will never know how many mothers fed their babies the defective product, threw away the can, and later had no idea why their infants became ill.

Dr. Derrick Jelliffe, in a 1980 interview with the *Wall Street Journal*, characterizes the history of formula production as "a succession of errors." He adds, "Each stumble is dealt with and heralded as yet another breakthrough, leading to further imbalances and then more modifications."<sup>50</sup>

The Food and Drug Administration (FDA) fact sheet on formula, titled the "Overview of Infant Formulas," maintains that "the composition of commercial formulas is carefully controlled and the FDA requires that these products meet very strict standards." Further, the document boasts that the quality of formula is "ensured" by the Infant Formula Act, a law which gives the FDA authority to create and enforce formula production standards.<sup>51</sup> This is a bold--and grossly

inaccurate--statement about a product that has a track record of health-threatening production errors.

The Infant Formula Act was signed into federal law in 1980 after deficient formula hit the market and caused infant deaths, says Baumslag. Realizing that there were no guidelines to oversee formula production, Congress introduced this law and gave the FDA authority to set the standard for--and monitor--formula production. But however well intended the Infant Formula Act may have been when introduced, it has not prevented significant health risks in formula production. In fact, in standardizing production methods, the IFA did not account for which ingredients were healthiest for infants. It simply considered which were most commonly used. This forced several smaller companies with alternative, perhaps healthier, ingredients out of the market. The legislation created an opportunity for major pharmaceutical companies to dominate formula sales.

### **How to Reverse the Trend**

If doctors or parents ever had any question about the cause and effect relationship between formula marketing and declining breastfeeding rates, they now can reference the first randomized, controlled study investigating the issue. Recently published by the *Journal of Obstetrics and Gynecology*, the "Office Prenatal Formula Advertising and Its Effects on Breastfeeding Patterns" concludes that prenatal exposure to formula advertising "significantly increased early termination of breastfeeding." Women who did not receive direct marketing materials from formula makers were more successful at maintaining the breastfeeding relationship.<sup>52</sup>

The American Academy of Pediatrics policy on breastfeeding, which was revised in 1997, is "a huge step in the right direction," adds Smith. She says, "It shows that the AAP is now solidly on board with breastfeeding." The statement encourages doctors to learn more about human lactation and promote breastfeeding as the optimal source of nutrition for babies. It also made headlines by encouraging women to breastfeed for a minimum of one year.<sup>53</sup> Smith adds that over the last five years she's also seen an emergence of lactation consultants in pediatric offices, another indication that the medical community is moving in the right direction. Still, this leaves the question of the economic ties between the medical establishment and formula makers.

The social marketing campaign launched by the formula industry has been a successful one, but this doesn't mean the trend is irreversible. The US can return to being a breastfeeding culture if healthcare providers, policy makers, and families make it a national priority. First, the medical establishment must financially disentangle itself from formula makers. The WHO Code must be enforced, and artificial baby milk must not be marketed through medical facilities. Second, birthing centers and hospitals should strive to meet the criteria of the BFHI and create a setting that is conducive to breastfeeding. Distribution deals and formula promotion in medical settings must cease because when mothers receive formula samples from trusted health providers, they assume artificial feeding offers health benefits, instead of considering the risks associated with infant formulas. The medical community has an ethical obligation not to violate their patients' trust or compromise their health for economic gain.

Finally, our entire culture must support breastfeeding. All workplaces should be equipped with lactation stations. Health insurance ought to provide coverage for lactation consulting. And no woman should ever be chided for breastfeeding in public or "too long." Then our culture will not just say breast is best. We'll act like it.

### **Notes**

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For additional information about artificial baby's milk, see the following articles in past issues of *Mothering*: "Eco-Mama," no. 95; "Putting Babies before Business," no. 88; "Formula Recalls," no. 86; "The Nestle Boycott," no. 77; "Politics of Breastfeeding and the Media," no. 75; "A Half-Century Movement to End Formula Marketing," (sidebar) no. 73; and "The Politics of Infant Feeding," no. 60.

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