

## ONE

# THE EVOLVING NARRATIVE OF INFANT FOOD CONTAMINATION

## HISTORICAL VIGNETTES

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### Part I: Wet Nursing

#### CONTAMINATION NARRATIVES: A SERIES OF SUPREMACIST GESTURES

It makes sense to begin to come to terms with the story of breastmilk toxicity by examining a series of historical events. This chapter offers sketches of a few moments in which infant sustenance either occupied public sentiment as being a problem or played a significant role in infant health, yet, for some reason, did not enter public discourse as significant. It is instructive to position the concept of and conditions surrounding “environmentally contaminated” breastmilk within a larger narrative of infant food contamination, and to investigate the degree to which this larger narrative involves the operation of often hidden gestures—what I will call “supremacist gestures”—within broader patterns around infant nourishment. This can help us to assess one of this book’s hypotheses—that to foreground the environmental contamination of breastmilk is to confront a series of problems central to contemporary culture—including sexism, racism, classism, anti-immigrant biases, ageism, speciesism, imperialism, and “corporatization”—problems that we must confront if we are to move toward health and justice and away from current trends toward short sightedness, irresponsibility, and injustice.<sup>1</sup> For us to come to a place at which we see breastfeeding—in any situation—as a fully accepted practice, and also one worth protecting, it is important for people to become more aware of the history of breastfeeding, as well as perceptions

about infant food contamination. Historical events form the background that has cascaded into a series of situations around infant feeding that we now face.

Part of coming to understand how approaches to infant feeding mask other, more insidious social, economic, and ideological impasses, has to do with coming to understand ways in which many of our actions today mimic, in sometimes subtle ways, practices associated with various historical moments. However the intricate web of events surrounding a particular moment in a particular geography play out, the figure of breastmilk tells a narrative about the structures of domination impacting the real-life experiences of diverse groups of people. I have chosen to offer a few vignettes of specific situations, rather than a flowing or inclusive narrative of the history of infant feeding trends; space does not allow such a genealogy, and that approach, methodologically, might promise something that would encourage the diverse experiences of peoples to be generalized or misrepresented for the sake of offering a cohesive narrative integrity.

#### DEFINING TERMS

At this point, it makes sense to offer some definitions. Most of the time, when we invoke the terms “environment” and “contamination,” we refer to a range of pollutants that we release into the “natural” environment—the air, water, soil, organisms, and bodies that surround us. But we can also read the “environment” in more expansive terms, taking a cue from the environmental justice movement, seeing it to refer to the places where we live—the cities, villages, neighborhoods, reservations, ghettos, and barrios, but also the nations, regions, and state of affairs we inhabit. Expanding the term’s meaning brought the beginning of the realization that the effects of our collective choices cause all people’s environments to be repositories for dangerous environmental pollutants—but some people’s more than others. It has allowed activists, particularly environmental justice activists, to talk about how their bodies have become colonized, marked with disease and ill effects from oppressive policies and practices played out, literally, on people’s bodies. Infant feeding occurrences tell these stories, as in the case of the Inuit; these tribal women’s breastmilk shows the highest levels of PCBs worldwide, so that mothers cannot live fully in their environments, eating traditional foods and also safely nursing their babies. One’s “environment” can also include the webs of social, cultural, and economic events—various structures that come together to shape our experiences, as well as the opportunities we are able to grant our children and our children’s children.

And so when I speak of infant nourishment contamination, this might involve pollutants and waste from industrial processes as well as a range of policy decisions governing their release into the spaces where we live. Or it might involve perceptions about infant sustenance; contamination narratives also include moments in which some women’s milk becomes tainted, is

perceived to be unfit, has some deficiency, or, as in the case of many periods in twentieth-century America, peaking in the late 1950s and early 1960s, when all women's milk began to be seen as somehow inferior to the man-made substitute. One's environment and the degree to which it is polluted, or is seen to be, can involve issues of race and class. People of color, immigrants, and low-income people live and work in spaces that subject them to toxins; in some historical junctures, they have lived under social stigmatization that defines them as somehow less "clean," less morally "fit." One's environment can involve choices about whether one should nurse if one tests HIV positive (in the attempt to limit the transmission of the virus through breastmilk), whether governmental or relief policies or those involving the marketing of formula will affect how one manages the question of possible breastmilk "contamination." It can involve social, cultural, ideological, political, and perceptual questions about gender relations and marketing practices.

Infant nourishment entails structures of oppression and power. It reminds us of how some of us are privileged and some of us are positioned to work toward bringing about a more healthy state of affairs. Infant feeding events remind us that we can choose to begin the long process of starting to honor the rights of all to health and freedom from oppression, or that we can decide to continue on our current path—one in which we allow oppressive structures to affect billions of people's lives. To sort through the question of where the interests of various groups intersect over infant feeding issues, it is important to investigate some of the anxieties, patterns, and habits that informed infant feeding practices at various historical junctures. Indeed, one of my contentions here, is that we need better interface between the various groups that have either shown an interest in infant feeding issues—or that are in the position to impact infant feeding. It is instructive to consider the successes and failures, the discursive battles, and the shifting practices around infant feeding.

We might begin by acknowledging that infant feeding to some constitutes a very particular physical and spiritual relationship that lies at the heart of human societies; it is the nourishment of our infants and children that allows for the perpetuation of the human race, and it constitutes a first gesture of engagement that will become part of a process in which children become socialized, learning to connect with others through language, social engagements, and other means of interaction. However, in saying this, we must recognize that for many disparate cultures at many junctures and in a variety of ways, the connection between infant and caregiver has been something other than a sacred, mythic, mother/child bond in which the mother suckles the child in an expression of deep connection. People have been using "surrogate" feeders and alternatives to breastmilk since the beginnings of recorded history, if not before (Golden; Jelliffe and Jelliffe; Palmer). While one of the goals of this book is to bring the general public to a level of comfort with breastfeeding such that women feel encouraged to nurse in any setting and are confident that their milk is free from contaminants, this does not mean infant care should "return" to some mythical zone in which only the biological mother/

child bond gets sanctioned, or where women are understood to be solely or primarily responsible for childrearing. Indeed, with more and more families opting for adoption, with a range of exceptions to the traditional biological nuclear family taking shape, with ravages of HIV, other diseases, natural disasters, and war causing babies to lose their biological mothers, and with more and more women working outside the home, it is important that other arrangements—surrogate nursing, breastmilk banking, legislation mandating nurseries and pumping and nursing breaks for mothers, fathers, and other caregivers—are instituted and made available.

#### ADDRESSING THE (COLONIZING) DANGERS OF OVERGENERALIZATIONS

While wet-nursing—a situation in which someone other than the biological mother suckles a child—has been practiced in many different locations and many different junctures in history, it is important to refrain from overgeneralizing about it. Indeed, as several studies have suggested, what we call wet-nursing has been practiced in a range of disparate cultures—from ancient Greco-Roman societies, to some cultures in Europe through several centuries, to contexts in Asia, Africa, and other parts of the globe, to certain enclaves in contemporary social settings (Jelliffe and Jelliffe; Maher). But, as a number of feminist scholars have reminded us, one danger of overgeneralizing about a historical practice is that this method often brings us to gloss over the intricacies of the specific cultural setting in which any given practice has taken place. It is to erase the lived experiences of real people—their struggles, pains, daily habits, and the particularities of their life stories. As Uma Narayan, Chandra Mohanty, and other feminist critics have suggested, failing to take into account the intricacies of particular social, regional, political, ideological, and economic variations is to engage in what Narayan calls a “colonialist representation” (45). Narayan here is critiquing what she calls “ahistorical and apolitical” Western feminist understandings of “Third-World traditions” that “replicate . . . problematic aspects of Western representations of Third-World nations and communities, aspects that have their roots in the history of colonization.” She explains that such understanding often involves generalizations made by “Western readers unfamiliar with the historical, social, political, and cultural contexts of the practice being discussed” (46). Her warning involves recognizing that “such contextual unfamiliarity is likely to enable problematic representations to be accepted uncritically and without awareness that the text contains an interrelated cluster of misrepresentations that collaboratively constitute a ‘colonialist stance.’”(46).

If we consider wet-nursing as it was practiced in the United States in the seventeenth through the nineteenth centuries, we see that different groups of people situated the practice differently, along a variety of structural axes (Golden 32). Looking at wet-nursing as a social custom, we discover that it

occupied different positions at different times and in different places, being at one time an act of friendship, at another a paid labor transaction, and at another becoming part of a system of plantation slavery. Vast disparities informed the practice; it could be an arrangement set up for a brief period or could last for several years, could bring the wet nurse a variety of rates of pay, and could offer her great prestige or be a chore commanded of her, without her ability to refuse. According to Golden, “the continuum of demand ranged from need—arising from the death or illness of a mother—to a choice,” while the continuum of employers “stretched from private families to public agencies.” Wet-nursing also followed a geographic continuum; some wet nurses lived with their employers, others took babies into their own homes, while still others visited the homes of their employers or the friend whose children they suckled (32). And, when it is practiced today, variations continue to operate.

Gabrielle Palmer, in considering European contexts, notes the “wide differences between regions,” pointing out: “In certain areas of Europe artificial feeding was already well established before the nineteenth century,” while in others it did not take off until much later. In addition, some women weaned before a year, while in East Linconshire women were reported to suckle their children until they were seven or eight years old, even in the 1820s (165). While we want to refrain from seeing all wet-nursing arrangements as being comparable, we can, on the other hand, draw some conclusions based on observances of practices that had similarities in a range of situations over an expanse of time. Palmer, for example, observes that while variations existed “between individual women, households and regions . . . it was certainly accepted for many centuries that important women often did not feed their own babies” (148).

#### WET-NURSING AND SEMEN-CURDLED MILK: ASSESSING THE MYTH OF THE CONSTITUTION TOO DELICATE TO SUCKLE

Palmer surmises that because some middle-upper-class wives in contemporary U. S. contexts have chosen not to work outside the home “because their husbands could afford it,” the habits of middle-upper-class women in many settings around wet-nursing seem to have been, in part, an expression of their socioeconomic status (Palmer 150). Indeed, research suggests that upper-class women viewed nursing in the same light as hoeing the fields or working the spinning wheel—as a task they would never think of performing. While such a parallel may allow us to understand historical situations through the filter of more familiar practices, wet-nursing in many settings appears to involve more than the simple fact of social rank. The more interesting and telling aspects of this story have to do with the specifics surrounding the long list of reasons why these women did not tend to nurse. It is not just that these women were considered too privileged to engage in suckling their own children, but that they were assumed, in many cases, to be too

delicate, high-strung, nervous, and excitable to produce milk that was either acceptable or adequate. Palmer notes, "One reason for discouraging noblewomen from feeding was that they supposedly lacked the desirable placid temperament that would be passed on to the baby through the milk" (161).

Feminist scholars Ehrenreich and English, writing about some settings in eighteenth- and nineteenth-century England, suggest the degree to which certain cultural codes informed thinking about nursing for a long period of time and in a range of settings. They note: "It was as if there were two very different species of females. Affluent women were seen as inherently sick, too weak and delicate for anything but the mildest pastimes, while working-class women were believed to be inherently healthy and robust" (Ehrenreich and English *Complaints*, quoted in Palmer 161). A comment from 1656 London on adult suckling (which was employed in certain situations of adult illness) illustrates the degree to which the health and purity of breastmilk were seen—at least in some settings—as linked to the diet, but especially to the disposition of the suckler. J. Beadle comments in his diary that "what made Dr. Cajus in his last sickness so peevish and so full of frets at Cambridge, when he suckt one woman (who I spare to name) forward of conditions and of bad diet; and contrariwise as quiet and well, when he suckt another of contrary disposition; verily the diversity of their milks and conditions, which being contrary one to the other, wrought also in him that suckt them contrary effects" (109). Some women, quite frankly, were seen to produce tainted milk.

Several scholars have noted that physical conditions certainly played a role in perceptions about the relative merits of various women's milk and perhaps rendered the breastmilk of some noble and upper-class women less abundant or salutary. For example, for many generations, peasant women in many social settings, because of gaming laws and the economics of food distribution did not have access to rich meats, liquors, and a variety of refined foods accessible to wealthier women, so that their diet of vegetables, whole grains, and legumes, depending on the region, would have offered what some would have considered to be more healthy lactation fare. According to Palmer, "The rich woman lying on her couch in the drawing room and perhaps only venturing forth in a carriage, lest the sun freckle her lily-white complexion, might have been vitamin D-deficient" (161). In addition, many peasant or lower-class women in many of these settings could not have afforded a doctor so that they would not have been subjected to the medical intervention of bleedings, which health professionals used liberally—"particularly for pregnancy and post partum conditions including perinatal haemorrhage" (161). This treatment, in many cases, would have exacerbated the chronic anemia that many non-lactating upper-class women faced as they proceeded through miscarriages, pregnancies, menstruation, and more pregnancies. That infant mortality rates remained lower in the agricultural regions than elsewhere up to the twentieth century suggests that the neces-

sity for working women to spend much time outdoors would have protected them from vitamin-D deficiency and other health issues that might have affected their children (63).

Aside from possible physical differences, the operation of cultural codes certainly impacted practices, but in complex ways. Palmer notes that while cultural rules meant that the noblewoman was “expected to delegate all physical labor to others. . . . Eventually the myth that noblewomen were too delicate and special to suckle would have provided strong emotional inhibition; how could she know that she could feed if everyone presumed she could not?”(148). But there is more to the story. When we look into the discursive constructions of infant feeding prevalent at several junctures and in many regions, we see that behind this fear of the milk produced by these “delicate” women lay another fear—that the semen produced by these women’s husbands curdled their breastmilk, so that, in many cultural settings, one finds a taboo against a woman engaging in sexual relations while she is nursing (Palmer 152; Pollock 215).<sup>2</sup> This fear of semen-contaminated breastmilk, which mandated abstinence during lactation, provided a powerful incentive for women of the upper ranks of the social scale to refrain from nursing; indeed, it may have played a key role in sustaining the practice of sending one’s children off to be nursed by another. Linda Pollock’s research suggests that the main reason for wet-nursing was the prohibition against sexual relations and the “belief that semen was supposed to curdle breastmilk” (215). But behind this, one discovers a perhaps more powerful group of incentives for the employ of wet nurses—the likelihood that women knew that nursing limited fertility, and the pressure for women in higher social ranks to produce heirs. This reading is corroborated by the apparent disregard concerning the degree of abstinence from sexual relations among the peasant (wet-nursing) classes, suggesting that semen-tainted milk was not the primary disincentive.<sup>3</sup>

In other words, it seems probable that the real fear on the part of an individual man of high social rank may not have been that his wife’s breastmilk would be tainted by semen or by her “weak” and “delicate” constitution—however much these fears tended to get circulated in the public domain—but rather that if his wife suckled their child, she would not be able to produce the abundant offspring necessary to ensure carrying on the family bloodline. Indeed, much of the literature of the day points to the intense pressure to produce heirs, particularly in light of the high infant mortality rate for babies of the wealthy—a rate we can now link, in part, to the lack of adequate spacing between births, which would have been exacerbated by the failure to suckle and thus suppress ovulation (Prior 27). Some of these women certainly realized that nursing would reduce their fertility and increase the likelihood for more of their infants to live; but the literature then repeatedly suggested that the pressure on these women to bear more and more children seems to have outweighed any desire many of them might have had to breastfeed for this purpose (Prior 27). Palmer corrects what she

calls a “falsehood of history—the myth of the poor ‘breeding like rabbits,’” and claims, “on the contrary, it was the aristocrats that deserved this comparison” (151). Indeed, in pre-industrial England, it was not uncommon for a noblewoman to endure eighteen pregnancies. Ann Hattton, for example, a not so atypical wealthy seventeenth-century English heiress, had thirty children: five sons, eight daughters, ten who died young, and seven who were stillborn (151). Corroborating this picture, when wet-nursing had to do as much with the primogeniture laws and the need to produce heirs as with the actual fear of milk contaminated by semen or made unsuitable by the noblewoman’s weak, nervous constitution, we find that “as the Renaissance advanced, the image of the nursing Virgin waned in popularity” (Dryden 166). The entire social fabric around infant feeding shifted in response to structures around economic and inheritance practices.

CLASSISM, SEXISM, AGEISM, AND LOOKISM:  
ASSESSING SOME TRENDS

While the dominant discourse around infant feeding for many centuries in many settings in Europe and the United States revolved around the understanding that women of rank could not produce the hearty, safe milk offered by their more robust sisters, reading between the lines in less dominant discursive zones such as journals, commonplace books, and advertisements suggests that yet another concern lay behind this class-based distinction: the desire among landed women to maintain a certain socially prescribed shape. At some junctures we witness anxiety among noble women that nursing would “ruin” their bodies, and make their breasts less beautiful. Another concern that emerges is fashion. By the sixteenth century, women of means began to wear corsets of leather, bone, or metal that flattened the breasts and nipples, making nursing virtually impossible (Palmer 150). On the other hand, poor women remained—at least until the Industrial Revolution reached full tilt—relatively unaffected by these trends. According to Palmer, “being fashionably dressed was confined to an elite who typically had to do extraordinary things to emphasize their eliteness”(150). Indeed, when one of the rare voices in favor of the English aristocracy’s refusing wet-nursing and suckling their own appeared in 1622—Elizabeth Knyvet’s book *The Countess of Lincoln’s Nursury*—the author made her plea by attempting to “sweep away all possible objections that nursing [is] troublesome . . . noisome to one’s clothes, makes one look old, and endangers health” (79).

Women in many of these situations found themselves subjected to “men’s laws.” And men’s laws, bound by structures involving class, ownership of land, title, and blood relations, determined that the pressures on the upper ranks of women to produce heirs and to look a certain way became so great that social practices associated with these goals outweighed other concerns—including protecting women’s health, infant’s health, and the possibility of

mother–infant connections. Even if we dismantle notions of any kind of essential connection between mother and child, and grant, as some contemporary discussions of motherhood have done, that some mothers simply do not feel a “natural” connection with their children, it still seems useful to note that at least some women who were prevented from suckling their children, or even from having their children in their presence, must have felt the loss (in many cases, acutely). Sexism and classism have functioned in many situations in such a way that women have been prevented from maintaining connections with their children. For instance, one has only to think about the practice in some contemporary settings of authorities depriving women of their children because of strict welfare policies. Some early accounts suggest that women suffered on an emotional level from separation from their children, while many others imply that, at times, the strain of frequent and excessive pregnancies in the name of producing an heir meant that many women and their babies died from childbirth and other complications. Without a doubt, infant feeding practices in many settings had significant bearing on maternal and infant mortality rates, and limited some women’s lives.

Accounts of effects on wet nurses vary, with studies suggesting that many of them certainly found themselves climbing social ranks through association with their charges. After all, in some periods, wet-nursing became one of the few professions available to women, and one in which wet nurses could gain significant social standing and economic independence.<sup>4</sup> It should also be noted that wet nurses often worked for many, many years; Judith Waterford offers a powerful example of the way such work served to bring some women into social settings that would otherwise have been closed to them. She worked as a wet nurse for over forty years, suckling a number of babies of prominent families. On the other hand, the literature suggests that some wet nurses of various periods faced problems. In some cases, these women became subjected to disease transmission through the process of suckling sick babies. In addition, some accounts have hinted that at least some of the wet nurses’ own babies died for lack of proper nutrition as a result of their mothers being employed to feed babies of the well-to-do. Janet Golden points to the classism exposed by an 1894 novel *Esther Waters*, in which the heroine articulates “what physicians had long admitted—that wet nursing often involved trading the life of a poor baby for that of a rich one” since wet-nursing often exposed the nurses’ own infants (97). Other accounts suggest that wet nurses often sent their own children out to be suckled by wet nurses lower on the social scale, and that while this practice endangered some, the implication that wet nurses were risking the lives of their own children is sometimes overblown in the literature.

When Mary Wollstonecraft forged ahead with her crusade to end the “subjugation of women,” she based her argument on the exposure of the class-based assumption that women of wealth were too delicate to do

anything except pursue the most mundane and insignificant pastimes, and she rallied against such socialization by arguing that women should come to terms with real-life responsibilities and become full citizens. Wollstonecraft takes up breastfeeding as a central tenet of her argument: “The wife, in the present state of things, who is faithful to her husband, and neither suckles nor educates her children, scarcely deserves the name of a wife, and has no right to that of citizen.” But she does not blame only women—she faults the system of socialization, the “respect paid to property,” from which flows “most of the evils and vices . . . as from a poisoned fountain.” And she blames men, proclaiming: “Would men but generously snap our chains, and be content with rational fellowship instead of slavish obedience, they would find more observant daughters, more affectionate sisters, more faithful wives, more reasonable mothers—in a word, better citizens.” Speaking as a dissident, and from what would remain the margins of social understanding for a long while, Wollstonecraft looks forward to a time when babies would no longer be “sent to nestle in a strange bosom.” It is interesting that Wollstonecraft, in exposing the class-based nature of practices that kept certain women from nursing their own children, should use an image of a “poisoned fountain” to articulate problems springing from the injustices of class and gender-based oppression. The labels of “poisoned,” “polluted,” “curdled,” or “unfit” breastmilk emerge in discourses that for a long time in many regions in Europe and America kept many upper-class women from suckling their own. Wollstonecraft suggests, through her image, that in many of these situations, while certain breastmilk was characterized as “poisoned” or “contaminated,” it was, in fact, social relations or class politics that were “poisoned,” so that, in some cases, wealthy women’s breastmilk got abandoned as “unfit,” while in others, as we will see in the next section, poor and immigrant women’s breastmilk became scapegoated as “polluted” or carrying “blights.”

#### THE “THREAT OF THE DANGEROUS STRANGER”: WET-NURSING IN SELECT MID-NINETEENTH-CENTURY AMERICAN CONTEXTS

As in earlier periods in various regions, the belief, in the middle of the nineteenth century and soon after in the United States, that middle- and upper-class women’s weak constitutions and “placid temperaments” meant that they could not produce milk fit for babies distinguished popular and medical literature (Golden 151; Palmer 149). For example, Ticknor, in *A Guide for Mothers and Nurses* (1839), argues that “women of the higher classes frequently possess such extremely sensitive and excitable temperaments as will render it imprudent for them to suckle their own children” (92, quoted in Golden 53). Indeed, a study of 1,000 women in Boston in 1908, and published in the *Journal of the American Medical Association* that same year, reports that 90 percent of 500 women described as poor and living in tenements were able to nurse their babies for nine months, whereas only 17

percent of 500 prosperous women living in better parts of the city could do so (Snyder 1213, noted in Golden 139). Clearly, while the availability of other means of feeding their children had an impact on wealthier mothers' "inability" to nurse, the fact remains that the widespread discourses telling them they could not produce healthy or sufficient milk and the women's beliefs about themselves played a role in their (in)ability to nurse.

The practice of the wealthy employing wet nurses persisted in many areas—but with a difference from earlier times. Because of demographic and social changes brought on by the Industrial Revolution, increasing urbanization, and shifting class structures, mothers stopped sending their babies to the country and started having wet nurses live and work within the home (Golden 38; Palmer 168). The practice of locating wet nurses as live-in domestic servants meant that a new population of employees came into the wet-nursing business. Wet-nursing had previously been performed by rural married women with homes of their own, but it now became a temporary occupation for poor, urban mothers. And as a new class of urban poor replaced the peasant matron as the typical wet nurse, the gulf between employer and employee grew larger and more troubled, with the new wet nurses scapegoated as responsible for infecting the babies of the wealthy with a host of blights. These women's breastmilk became associated with disease, including scrofula, tuberculosis, typhoid, syphilis, and "wasting diseases." And the public began to fear that the perceived lax morals, intemperance, and unmanageable "ill nature" of these women would spread through their breastmilk. Increasingly, the public began to express suspicion of this new class of wet nurses. As the new wet nurses became more of a fixture in their employer's homes, they were more and more associated with the taints of unwholesome environments brought from the slums and tenements, and with potential threats of "flawed" characters being imparted to babies (Fildes 168–210; Golden 38).

In England and the United States, the new wet nurse was more likely to be a younger, unmarried mother; the lack of trust was reflected in the fact that "this wet nurse had to live in and be completely separated from her offspring in case she was tempted to feed it" (168). With the problem of the displacement of large segments of people from rural areas, particularly after the enclosure acts privatized the commons that had provided many with opportunities to engage in subsistence activities, many women, cut off from rural communities and thrust into urban slums, found themselves with few choices outside of prostitution and wet-nursing. Prevailing notions were that "fallen women proved by their very condition, that they possessed uncontrollable, ill-disposed emotions, which affected the quality of their milk and was even supposed to convey cancer" (Palmer 169; F. B. Smith 83). Public outcry became heated as people worried in newspapers, magazines, and pamphlets that such women's "tainted" moral characters might infiltrate their babies.

Similarly, in the late nineteenth century, many antebellum physicians believed that strong emotions made milk "toxic" (Golden 151). Legends

circulated among professionals telling of mothers and wet nurses who had “witnessed acts of violence, engaged in sexual intercourse, or otherwise become excited.” When babies began to nurse from “the breasts of those subjected to such vagaries of poor environments,” they “fell into convulsions and died shortly thereafter.” A popular novel, *First Baby*, published in 1881, suggests the degree of anxiety over the problem of milk tainted by the character of the wet nurse: when the mother in the book suffers pneumonia, the father and his doctor get names for wet nurses from the *New York Herald* (Golden 141). After searching and searching, they finally hire Mrs. Badall, who is promptly fired after the employers fear that a visit from her drunken husband had rendered her milk unfit. The novel points to the view of human milk as a “volatile substance that could become toxic as a result of the lactating woman’s strong emotions and, by implication, sexual activity” (Eberle 35; Golden 66).

While these “dangers” to infants elicited what at times became a heated public anxiety, another danger—the transmission of syphilis—was sometimes suppressed so that wet nurses occasionally contracted the disease from their more privileged nurslings, even as they were frequently scapegoated in various media as being the only source of the disease. As at least one study suggests, the assumption that the “moral taint” could be spread only from the lower to the upper ranks of the social scale resulted in little being done to protect the health of wet nurses, many of whom were thrust into wet-nursing by strict welfare policies that gave them few other options for making a livelihood (Golden 81; 144). Since estimates of infection among the “better classes” ranged from 6 percent to 18 percent in the early twentieth century, wet nurses “had reason to worry”; but this part of the story, for the most part, remained silenced (Golden 145; Jeans 55). The policy of restricting welfare eligibility to force individuals to work, and the belief on the part of civic officials that if a woman “had milk to sell” she should not receive a stipend (called outdoor relief), meant that women had little choice in the matter (Golden 81). An exception can be found in a play called *Damaged Goods* about an upper-class baby who is infected with syphilis; the climax occurs when a doctor “saves”—at the last minute—the lower-class woman who had been hired as the wet nurse (147). What is telling is that although bottle-fed babies—who became more prominent at this time—could and did die quickly of infections caused by bacteria-laden milk, that which Golden calls the “slow and elusive venereal infections were even more dreaded, not least because of the social stigma attached to them” (143). When people denounced wet nurses, descriptions involved “the rhetoric of moral pollution” (155). Immigrant women serving as wet nurses were blamed for typhoid fever, and shunned for fear that they would translate their fallen and tainted morals to infants. As with syphilis, “rates of infection” suggest fears had more to do with racial, social, and economic factors than with an easily stratified threat from wet nurses.

One reason for the shift in attitudes toward wet nurses seems to come from shifting attitudes toward immigrants, who increasingly served as wet nurses. First Irish and later Scandinavian and German immigrants replaced native-born servants (Golden 43). Occurring at a time when “nativist” concerns pervaded public sentiments, this shift determined that such women, considered racially and ethnically “other,” were subjected to social stigmatization and scapegoating (Fildes 188–209; Golden 43). To contextualize such occurrences, it is important to bear in mind that “racism” concerns the social stigmatization and oppression of particular ethnic groups based on particular social definitions of difference; as a social construct, it has less to do with actual racial differences than with social constructions of difference at a particular juncture. During the latter part of the nineteenth and early twentieth centuries, nativist sentiments, the privileging of “native” Americans (which meant not Native Americans as we use the term today, but the Anglo-Europeans who had resided in the United States since the early days of colonization), defined many people’s conceptions of difference. As the nativist movement took hold, anti-immigrant sentiment became heated. Initially treated as nonwhite, European and other immigrants worked to “deflect” “debate from nativity, a hopeless issue” for them, and to focus on “race, an ambiguous one” (Roediger 189, quoted in Rosenblum 15). So, during this period, anti-immigrant and racist attitudes merged to scapegoat all those constructed as “other.” And all of this became tied up in debates over “tainted” breastmilk.

A glimpse of a letter written in 1861 by Elizabeth Cabot, a wealthy Boston matron, suggests how the “geographical and social distance between the working poor and the middle and upper classes was expanding” (Golden 43). She notes: “I roused up and trotted over, and thought I would raise a wet nurse in the village . . . invaded four Irish mansions, succeeded in raising a wet nurse and a woman to take her baby and sent her off with Powel into the town to be examined by Sam [the doctor].” But as women looked to immigrants to fulfill wet-nursing duties, the gulf widened. Golden points out that the literature “refracted the theme of increasing class estrangement by consistently juxtaposing the nurturing middle-class mother against the threatening lower-class wet nurse” (47–48). Indeed, we find that a new concern overshadows the pages of books written in the 1840s and 1850s: the threat of the “dangerous stranger” serving as a wet nurse (Beach 631; Golden 51).

Golden notes how the subject “inspired both the popular and the medical imagination, combining the growing alienation of the middle and upper classes from the urban poor with more specific fears about disease” (Golden 51). We find, for example, that the 1848 edition of the *Home Medical Guide* written by the botanic practitioner Wooster Beach uses the term “stranger” in reference to wet nurses who communicated “loathsome and fatal diseases and gave milk ‘rendered unwholesome by age or other causes’” (631; my italics). Racism surrounding the arrangements following

the Civil War also impacted the scene, so that fears of freed slaves combined with fears of immigrants and created an alarmist climate leading up to the eugenics movement of later decades. It is not surprising, therefore, that in the years after the Civil War, “Nativists . . . complained that Americans of ‘good stock’ were giving birth to fewer children than in past generations and that those few infants were being nursed at the breasts of immigrants” (137). That lactation suppresses ovulation meant that those engaged in public commentary around “nativism” would not have wanted American women of “good stock” to nurse, since it would have further affected what was seen as “race suicide.” That many remained suspicious of immigrant wet nurses most probably served as an underlying motivation for the eventual switch to formula. Many critics “expressed deep concern that foreigners, including foreign-born wet nurses, were corrupting society” so that wet-nursing became a site at which many cultural fears became played out (Golden 153; Haller 53).

Research corroborates that this scapegoating of wet nurses seems to have been a long-standing practice, suggesting that classism, racism, and ethnocentrism have long influenced infant feeding decisions and thinking about the effects of infant nourishment (Fildes 188–210; Palmer 168–70). Indeed, Palmer’s comment on earlier arrangements in Europe holds true in the context of many mid-late nineteenth-century situations in the United States: “In spite of the obsession with lineage and ‘blood’, these noble biological parents apparently influenced only the positive attributes of the child and any adverse characteristics could be blamed on the wet nurse” (161). The classism, sexism, and anti-immigrant sentiments operating here will emerge in other forms in later infant feeding events. While some transmission, or at least perceived transmission, of a range of conditions—from typhoid, to tuberculosis to syphilis—“through” breastfeeding certainly did occur,<sup>5</sup> what is striking is the degree to which contamination discourses involving the “strange others” infiltrated the public domain. Indeed, the degree of anxiety seems to far outweigh the actual danger, especially when we take into account that other, more significant dangers of infant feeding barely registered in public perceptions, if they registered at all. One of these was “swill milk”—post-distillery slop used as the basis for infant formula, a practice protected by governing bodies with an interest in supporting industry, even at the cost of endangering infant health.

The prevailing fears about tainted milk seem to have been linked to a host of social concerns, including shifting demographics, changes in relationships between the poor and the wealthy, unstable social and economic relations, instability resulting from continued colonization of vast portions of the globe, and labor unrest. Several scholars suggest that the proportion of incidences of children dying or becoming ill from unsafe breastmilk did not rise in this period. In fact, more children were surviving infancy and toddlerhood than in previous centuries. But public discourse tended to display a growing

distrust of the typical wet nurse, and her breastmilk, thus suggesting that the discourse itself serves as a gauge of other factors that may have had little to do with infant nourishment.

Another indicator of the way class issues get reflected in infant feeding events involves the effects of wet-nursing arrangements on the children of the wet nurses themselves. When wet nurses started to be brought into the homes of the families whose children they were hired to nurse, the danger of their own children being abandoned, becoming ill, or dying seems to have become more pronounced. The public anxiety over the well-being of more well-to-do infants dominated the discourse, while, behind the scenes, the more pronounced problem of the ill effects on the children of the wet nurses received little attention. This suggests, along with the seemingly overblown attention to the possibility of privileged babies contracting strange diseases, that class issues and pressures over unstable social, demographic, and other factors contributed to the anxiety that got manifested as fears of contaminated breastmilk.

This blaming of the less privileged, and attributing any negative effects to their biology or cultural traits, are relevant as we move to more contemporary contexts. For example, although studies have suggested that the breastfed children of certain racial, ethnic, and underprivileged groups have been more susceptible to negative health outcomes due to their proximity to polluting industries, public sentiment has appeared more concerned with health effects on the breastmilk of more privileged moms—if we can take coverage of the issue in major newspapers and other media sources as a gauge. At other times, classism and racism have emerged in concern over the tendency of poor women and women of color to nurse at lower rates than other women—without attention to the effects of structural racism, classism, and sexism on infant feeding. An article covering a 1995 midcourse report on the status of healthy people 2000's objective, with a follow-up report conducted in May 1999, notes that while breastfeeding rates rose for many women, for American Indian and Alaskan native mothers, the rate decreased 2 percent from 1990 to 1997. Celebrating that other women were nursing at higher rates in 1997 than they were in 1990, the article does not mention that the period at stake coincides with environmental justice groups' attention to health effects of environmental pollution, especially for Native American and Alaskan women. In addition, while the media focuses on the lower breastfeeding rates for poorer women and women of color, they rarely note that these women are less likely to be able to breastfeed, given that policies protecting workplace pumping tend to favor more privileged women. In other words, the public dismisses such failure to nurse as stemming not from an awareness of environmental effects or social effects closely linked to the classism, racism, and ethnocentrism that allowed these groups to be situated in harm's way, but from some flaw—social, cultural, or biological—attributed to the mother herself.

As racial, ethnic, and class conflict and wariness of immigrant women grew, a parallel development—and the degree to which the relationship was causal continues to be unclear—was the increasing intervention of medical practitioners into the practice of wet-nursing (Fildes 168–88; Golden 128–56). As several scholars have noted, physicians such as Dr. Beach focused more and more on problems with infant feeding, linked them to an expanding perception that the well-to-do had become vulnerable to the infections of lower classes and racialized others, and implied that the solution lay in the studied application of medical knowledge (Golden 52). But again, classism, racism, and ethnic prejudice infiltrated this domain and determined the contours of the proscriptions doctors delivered to women. For example, when poor urban wet nurses began to request access to the wealthy woman's diet, Golden finds that “doctors could barely disguise their contempt for poor women who wanted to dine like their social superiors, although they wrapped their analyses in medical terms” (148). John Price Crozer Griffith argued, for example, that “a woman from the lower walks of life given unrestrained opportunity to indulge freely in food to which she has not been accustomed” was “liable to indigestion” and would be more likely to cause problems for her nurslings (Griffith 186 quoted in Golden 148).

Doctors and commerce clearly did play a role in the waning of wet-nursing as a means of employment for women. The gendered component comes into relief when we consider this aspect of the story. In many situations before the latter part of the nineteenth century, “the ability to suckle an infant lifted women out of severely regimented institutional life at almshouses and welfare institutions—once they had become fallen—into relatively high paying positions” (Golden 79). Whether the change can be attributed to perceptions about “polluted breastmilk,” to the increasing medicalization of wet-nursing that slowly gave way to the medicalization of infant feeding and the touting of “artificial food,” or to the increasing infiltration of “artificial food” into the markets, wet-nursing began to decline.

#### HUMAN MILK BANKING

Increasingly, the practice of selling milk gave way to the practice of giving milk. And this may reflect a gender bias as well. Certainly, class issues play a role. It is telling that as breastmilk went from being seen as a “commodity” to being viewed as a “gift,” the public anxiety over tainted breastmilk began to fade. One marker of the shift occurred during World War II; according to Golden, “the propriety of women selling something that babies needed for their survival began to be challenged during WWII, when blood donation started to be touted as a patriotic duty” (203). An interesting counterpoint comes with the story of Charles Drew, the doctor who developed the technology for blood transfusions that saved many lives during the war and since. The catch is that although Drew was a person of color, the blood of soldiers

of color and whites was kept segregated during the war and in later years (Love). So while breastmilk then came to be seen as part of a moral transaction, something not to be subjected to the harshness of commodification, blood, at the same time, while regarded as part of a moral transaction, something that one could give as a gift to those in need, also became subjected to the calculations of racial prejudice and bigotry.

As milk selling decreased as a practice, milk giving, and indeed the remnants of milk selling when it does take place, seemed to become free of the fears of contamination that had dominated wet-nursing discourses in the latter part of the nineteenth century. Indeed, for a period in the United States in the 1960s and 1970s, graduate students became the predominant sellers of breastmilk; according to Golden, the perception was that these women were selling “smart milk” (204). Perhaps with the foregrounding of class, race, and ethnicity-based anxiety during the civil rights era, the waning of anxiety over the possible contamination of certain women’s breastmilk occurred. Milk banking, which continues today, commonly gets framed as an activity free of fears about class and race; the transformation of these issues associated with earlier periods of the movement to subtler, less overt forms of class and race bias—reflected in the dubbing of “smart milk”—seem to suggest a lessening of public fears of contamination. But such apparent confidence appears to have masked other fears—for example, the fear of the spread of HIV/AIDS through breastmilk.

The growing recognition of the possible transmission of HIV/AIDS through breastmilk has had dramatic bearing on human milk banks. The Human Milk Banking Association of North America notes that in the early twentieth century in the United States, milk banking “blossomed and grew with increased use of donor milk for ill and premature infants” (“Human Milk”). Early on, mothers with abundant milk were asked to provide sustenance for premature and ill infants by either nursing directly or expressing milk. In 1909, Austria established the first milk bank, in Vienna, with Germany following soon after, and the United States establishing a bank in Boston, in 1919 (“Human Milk”). As obstetrical and pediatric procedures advanced, and more premature babies survived, donor milk banking progressed, so that, by 1982, an estimated thirty milk banks operated in the United States. In 1985, a group of health care providers and concerned citizens established the Human Milk Banking Association of North America (HMBANA), focusing on promoting milk banking and establishing standards for all North American milk banks. Published in 1990, these standards inform milk banking documents worldwide, with HMBANA representatives reviewing and updating them annually.

As with earlier contamination dramas, the dawning of the HIV/AIDS scare had a marked and immediate effect on public perceptions, profoundly influencing human milk banking. According to HMBANA, “Concern for the unknown and need for increasingly complex screening of donors and

milk processing resulted in many banks closing, almost overnight” (“Human Milk”). By the end of the 1980s, the number of banks in North America had fallen from about thirty to about eight.<sup>6</sup> But another shift occurred in the 1990s with evidence of safety and increased research on the benefits of human milk. Many more health professionals and families, particularly those with ill or premature infants, have requested donor milk, and most countries in the “developed” world have established banks. Today, banks pasteurize milk with the Holder Method and check for bacterial growth; contaminated milk pools, which contain milk from three to five donors, are discarded (“Human Milk”). Workers freeze the milk and ship it overnight to hospitals and individual recipients at home, so that many babies who would not otherwise benefit from the unique properties of human milk are able to do so. My hope is that milk banking will become much more popular and that donating and selling milk will serve as ways for women to participate in fostering health and a sense of communalism.

#### WHITE SUPREMACY AND THE COLONIZATION OF BLACK WOMEN’S BODIES

Breastfeeding practices that occurred at various moments during the period of the diaspora from Africa reflect how notions about race, power, capital, and labor influence people’s lives in myriad ways. During slavery, when enslaved people’s bodies become colonized, the slaves’ bodies became marked with the effects of violence and oppression through a system of capitalist production, so that they become treated as machines, objects, or animals—as nonhuman (legally three-fifths a human-being). And, while the image of the bound and shackled slave, the bleeding slave, the slave forcefully raped or starved by the slave master haunts us just as later images of lynchings do, other events played out on the bodies of slaves tell other stories of oppression. While infant feeding practices do not disturb us with their violence, they do reflect how the dehumanization endured by slave populations took many forms.

One of the most horrific realities of the system of slavery as it operated in the United States was the frequent separation of slave women from their babies. This served as part of the effort to mark slaves as capital, as “nonhuman” and thus not worthy of being allowed to maintain family units, so that slave children, as capital, could be sold to other slave masters. This separation—and the separation of women from their babies as a result of infanticide or infant mortality from harsh living conditions—stands as a reminder of just how inhuman, chillingly heartless, and calculated such a system was. Before I had a baby of my own, I do not think I could have understood just how unthinkable such a separation could be. Now, reading slave narratives and confronting the systemic separation of children from their mothers, I find these stories even more poignant. In a very real sense, the massive

colonization that took place during the slave trade involved the colonization of people's bodies in countless ways, and one that we rarely confront because patently violent images are more compelling includes this institutionalized separation of women from their children. While research suggests that the colonized Africans nursed their own babies before the diaspora, the disjuncture of slavery disrupted this practice and brought, in many cases, absolute separation between mother and child.

Biracial images of white women suckling slave babies—to protect their “investment”—and of slave mammies suckling the white masters' babies as one of their duties—babies who would grow to become masters themselves—appear from time to time, reminding us of the absence of the image of mothers—of white or African descent—suckling their own (Fildes 128–29; Golden 26).<sup>7</sup> Also, in referencing biraciality, these images gesture toward the frequent violation of slave women's bodies by slave masters, so that the absent image of the slave nursing her own child becomes fraught with reminders of the constant violence being played out on her body and the lack of autonomy she experienced. Henry Giroux's commentary on the United Colors of Benneton's use of racially charged photographs to sell clothing reminds us of just how provocative and enduring such images can be (23–29). The 1980s era advertisement with a very black woman suckling a very white baby drew attention to the ways in which the company sought to capitalize on charged racial issues, in order to promote their mission—of selling sweaters. Whether championing themselves as somehow uniting various races into a harmonious whole or as portraying some of the most sensitive racial occurrences in contemporary society, with roots extending back to the period of slavery, the image of the biracial suckling registers more than just a welcome reminder that even nursing can become a way to “unite” the diverse “colors” of the globe. While some white women in the upper ranks of American society during many historical and temporal geographies undoubtedly found their infant feeding choices limited, whether they experienced wet-nursing arrangements as deprivation is not unambiguously evident. In contrast, the curtailment among the enslaved could only constitute one of myriad examples of the deprivation and dehumanization played out upon the completely colonized bodies of the enslaved.

## Part 2: Mathematical Formulas

### THE ADVENT OF SCIENTIFIC INFANT FOOD AND THE ERA OF “SCIENTIFIC MOTHERHOOD”

While most infants in the United States received breastmilk, either from their biological mother or from a wet nurse through the nineteenth century, increasingly—though unevenly—artificial feeding went through a transition

from being viewed as a “death warrant” to being seen, by the 1940s, as the saving grace that set babies free from a host of diseases and ailments (Apple 4; Baumslag and Michels 127; Palmer 203). Reviewing this transition from breastmilk to formula during the late nineteenth and early twentieth centuries, and following it to the point when fewer numbers of women (in the United States) nursed than ever before or since—the late 1950s and early 1960s—when hardly any still nursed at six months—is important in that it sets the stage for today’s situation. We can link the sluggish dawning of awareness that the environmental contamination of breastmilk is something to be taken seriously to the relatively low rates of breastfeeding.

In part, the shift from breastmilk to formula can be attributed to a shift in attitudes toward science, toward motherhood, and toward the burgeoning medical profession. It is important to note that we can draw a connection between pro-science, pro-technology, pro-capitalistic attitudes—approaches that often privilege these without due attention to systemic consequences—and the assumptions that have brought us to the current impasse in which the environmental contamination of our water, air, soil, bodies, and breastmilk is a reality (Carson; Merchant *Death*). It is worth reiterating that for people to become concerned about the environmental contamination of breastmilk, they have to first see breastfeeding as an important activity. And, as this section will suggest, a chain of events in the later half of the nineteenth and early part of the twentieth centuries determined that the vast majority of U.S. women by the early 1960s would never nurse their babies.

During this period, a developing confidence in science, medicine, and technology, discoveries in bacteriology, anatomy, physiology, and nutrition, as well as changes in public health and hygiene and innovations in advertising and marketing spawned a new attention to infant feeding. Increasingly, analyses of infant morbidity and mortality—in particular those launched by the burgeoning baby food industries, many of which had close links with scientists and medical people—pointed to the inadequacies and deficiencies of human milk. Simultaneously, the overall rise in infant survival—due to a range of factors—often got attributed to the increasing reliance on formula. As medical researchers used scientific findings to better explain and predict the course of disease, and as changes in infrastructures positively impacted public health, the public began to associate science and medicine with prestige and to regard them with confidence. As Rima Apple points out, “‘science’ became practically synonymous with progress and reform” (17). Consequently, mothers began to see the medical professional as the expert, and to abandon advice from their own mothers, neighbors, and relatives—traditional advice—that had defined infant care in the past.

Janet Golden notes that pediatric books published between 1825 and 1850 began “to assert that the nursery was a medical domain as much as it was a domestic space” (53). Becoming “arbiters of wet-nurse selection and management,” doctors during the second half of the century began to blame