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## Hidden Hunger

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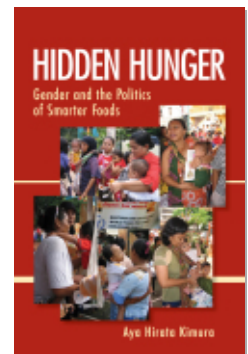
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## **SMART BABY FOOD: PARTICIPATING IN THE MARKET FROM THE CRADLE**

**It appears that it is practically impossible to supply enough iron from unfortified complementary foods to meet the iron requirements of infants. . . . The situation appears to be similar for zinc at 6–8 months.**

—World Health Organization, 1998

**Only in the late 1990s did scientific evidence demonstrate that traditional homemade [foods], whatever the cost, could not meet infant and young children’s micronutrient requirements, especially for iron and vitamin A. In order to meet infant and young children’s requirements, they need fortified complementary foods that are only available commercially.**

—Soekirman, 2005

Wandering through the maze of narrow streets that crisscross a Jakarta neighborhood, I finally reach Ibu Eti’s place. Dilapidated and tilted, the shack looks like it is about to collapse. There are several plastic buckets outside and a man is doing laundry, squatting. I meet Ibu Eti and some of her five children. Ibu Eti’s husband is the one who is doing laundry. He does it now because he lost his job. I ask what Ibu Eti does, and she hesitates a bit before saying that she begs on the street. When she became pregnant with the fifth child, she says, she gave up and started doing it because there was not enough money to get by. Like many women whom I have seen on the pedestrian overpass above Jakarta’s chronically congested roads, she begs with the baby on her lap. Despite their poverty, she tries to use various commercial baby food products. She explains that although she cannot afford Dancow (formula by Nestlé), she has managed to buy Promina (weaning food by Indofood) to give to her kids and shows me the shiny package in the dark room where we are sitting.

Nutritionism brings a new visibility to women’s and children’s nutritional status. With the growing interests in hidden hunger, baby foods and foods for pregnant and lactating mothers have been subjected to increasing scrutiny as to micronutrient composition. Whether or not food for babies prepared by mothers

at home fulfills the micronutritional standards has become one of the important questions posed by policymakers and nutritional scientists. Governmental and nonprofit organizations started fortified baby food programs, and people like Ibu Eti have received, for instance, fortified cookies as part of an antihunger program. A growing number of nutritional studies suggest that the majority of homemade baby foods are nutritionally “suboptimal,” especially in terms of micronutrients. From such a perspective, mothers like Ibu Eti, who buy fortified baby food products, are “aware” mothers.<sup>1</sup> But how do we make sense of the rise of such “smart” baby food for the poor and the official advocacy of them in developing countries? In what ways do poor mothers respond to the scientization of baby food? What does it tell us about the politics of motherhood in the contemporary global South?

Preparing food for one’s family, particularly young children and babies, might seem like a quintessentially private experience, a realm of love, care, and intimacy. Yet the rise of smart baby food is the product of both scientific and nonscientific diagnoses involving public health science, government nutritional policies, and corporate estimates as well as women’s own diagnosis of their needs and the needs of their children. Not only mothers and babies but also those in science, business, and the state have a stake in how babies are fed.

The story of smart baby food can be thought of as an aspect of the growing control of women’s intimate space by scientific expertise. The *scientization of motherhood* refers to processes by which mothering practices have come to be defined as scientific issues, resulting in a greater role for scientists and experts (Chase and Rogers 2001).<sup>2</sup> Feminist historians have documented processes in which problems related to mothering came to be seen as better addressed by experts than mothers, requiring intervention through rationalized and science-based regimens (Badinter 1981). What counts as good mothering is increasingly defined by medical and child-rearing experts. As a result, reproductive issues such as contraception, pregnancy, and childbirth have become subject to professional controls (Ehrenreich and English 1978; Margolis 1984), and children are increasingly considered to be in need of expert instructions and scientific products to be properly modern and civilized (Ladd-Taylor 1994).<sup>3</sup> Analyses of contemporary motherhood discourses suggest too that the importance of turning to experts for advice continues in the contemporary ideologies of motherhood that glorify “intensive mothering” (Hays 1996) and “sacrificial motherhood” (O’Reilly 2004). Familiarity with scientific assessments of all sorts of parenting practices still counts as an important requirement for being a good mother today.

Because we are so accustomed to the image of developing countries as backward and barely fulfilling basic needs, scientization might seem irrelevant in

developing countries, perhaps too fancy to be discussed in the context of the Third World. Yet mothers in developing countries are no less subject to pressure to achieve scientized motherhood. Interlinked fears of ignorance, poverty, underdevelopment, and negligence still make mothers suspect in the context of the contemporary developing world. Mirroring the colonial fear of “cultural contamination” (Stoler 1995, 72) from native mothers, Third World women’s mothering practices create great anxiety in the minds of development experts and state bureaucrats. These mothers’ cooking, feeding, and nursing constitute a high-stakes game for state and international development experts, and their dutiful compliance with expert instruction is important for development to take place.

The scientization of motherhood does not just devalue mothers’ personal experiences and experiential knowledge vis-à-vis scientific and expert assessments and instructions. The privileging of scientific expert knowledge also accelerates the commodification of motherhood. As many observers of the scientization of motherhood have noticed, the corporate world has had a hand in molding the intimate space into not only a scientized but also a commodified space, offering various products and services to help translate expertise into consumption choices for mothers. Measured against scientific criteria, commercial products seem to fulfill the unmet needs of babies and children with tremendous accuracy and effectiveness. Helping to construct the superiority of the corporate offerings, the scientization of motherhood then subjects mothers to not only new languages of science but also new “choices” for consumption. Even the very poor are under such pressure. Ibu Eti, for instance, told me how much she wanted to buy brand-name formula. Agonizing over different products to pay for out of what she gets from begging on the street, and what to give up in buying them, she is in a situation that captures the striking contradiction of nutritionism in its capitalist incarnation and its impact on motherhood. In this chapter I situate the smart baby food phenomenon in Indonesia at the intersection of development discourse, transnational knowledge circulation, and global capitalism, and explore this complex interaction as it changes the meaning of motherhood in developing countries.

Ironically, what is sidelined in the world of scientized motherhood that is inhabited by scientists, policymakers, donors, and companies, is women like Ibu Eti who are actually trying to feed their children. Preparing food for one’s family, particularly young children and babies, is an emotional and personal experience for many women, and the process of scientization has profoundly influenced the meaning of baby food for them. If science and market are increasingly singing the gospel of micronutrients, what do their target audiences have to say? What are the mothers’ understandings of the food problem, and how do they relate to the scientized understanding of infant feeding?

After examining the expert discourses in the first half of the chapter, I move back to women's worlds by asking how *they* think about their baby food. I asked mothers in Jakarta's slum areas about their experiences of feeding their children. These interviews are important for my broader argument on nutritionism as well. So far, my narrative has focused on the discourses of experts and government bureaucrats, and the "beneficiaries" of their policies and programs have been on the periphery of the debates, often abstracted as numbers. This is, in part, by necessity. Two commodities that I examine in this book as representative of mandatory fortification (wheat flour) and biofortification (Golden Rice) have no direct connection to consumers. Wheat flour's fortification is perhaps rarely noticed by consumers, and Golden Rice was not yet marketed. By focusing on baby food, in this chapter I provide a rare glimpse into the consumer side of the story. The stories told by mothers further delineate the power and limits of nutritionism in defining the nature of the food problem in developing countries.

## **Making "Smart" Baby Food**

Infants and children are considered a "vulnerable" population for micronutrient deficiencies, as for many other diseases. Global prevalence is estimated at 127 million preschool-aged children under five with vitamin A deficiency (West 2002), and 45.8 percent of children under five in Asia and 40.4 percent in Africa with iron deficiency anemia (UN ACC/SCN 1998). In addition to vitamin A, iron, and iodine, researchers are also discussing the possibility of widespread zinc deficiency (International Zinc Nutrition Consultative Group 2004).

There are various causes for babies' micronutrient deficiencies beyond simply "bad" food. Although micronutrient deficiencies might seem to be caused simply by foods deficient in micronutrients, their etiologies are actually far more complex. For instance, infection is an important cause of anemia, and hence hygiene improvement can be a policy prescription to prevent iron deficiency. However, as we have seen, it is food that is currently getting attention as the culprit in deficiency syndromes while other possibly relevant issues such as housing and water sanitation are sidelined.

Along with such focus on micronutrients in food, chemical analysis of baby food has become intense. In particular, what nutrition experts term "complementary food" (CF) and "supplementary food" (SF) for babies has become a target of micronutritional analysis. CF is defined as additional food provided to infants and young children (six to twenty-four months) to complement breast-feeding. SF denotes food provided to children or pregnant women in addition to their regular daily food.

The global expert recommendation regarding infant feeding is “exclusive breast-feeding” (feed only breast milk without any other liquid or food) for the first six months, as experts think breast milk fulfills all the nutrition requirements of the baby until that point. After six months, nutrition scientists recommend that babies get CF. Many parts of the world depend on homemade CF and SF, and scientists have begun to examine their micronutritional values. A number of studies have found that many of these are not up to standards in terms of micronutrients (Brown, Dewey, and Allen 1998). Therefore, commercial baby food has become an attractive option in the eyes of experts, as exemplified by these statements from WHO:

It appears that it is practically impossible to supply enough iron from unfortified complementary foods to meet the iron requirements of infants.... The situation appears to be similar for zinc at 6–8 months. (1998, 106-7)

Rapid urbanization and changing social networks affect caregivers’ ability to use freshly prepared home-grown foods. Centrally processed fortified foods, which can play an important role in ensuring adequate complementary diets, have been successfully promoted in various settings. Public-private partnerships can play an important role in making available nutritionally adequate low-cost processed foods. (2001b, 4)

Of course, there has been considerable tension among nutrition experts regarding recommending commercial fortified foods in the Third World. Expert recommendations often carefully include fresh fruits, meat, and vegetables as possibilities in addition to commercial fortified food. Yet the suboptimal micronutrient level of many traditional baby foods in developing countries has resulted in a growing emphasis on commercial alternatives.

The superiority of fortified baby food is also buttressed by constructing the inferiority of other nutritional interventions, such as nutrition education and supplement distribution. Fortification generated tremendous excitement among experts in part because they were frustrated with other micronutrient strategies, namely nutrition education and supplement distribution. Fortification seems better because it has less compliance problem. Due to this comparative advantage over other micronutrient strategies, fortified baby food has become a popular project for many international organizations and nongovernmental organizations. For instance, among the organizations with fortification missions discussed in chapter 3, many chose to fortify baby food. The International Life Sciences Institute started fortified CF as one of their focus projects in Southeast Asia. Global Alliance for Improved Nutrition (GAIN) started to provide fortified infant food in India and elsewhere.

Mirroring this international trend, Indonesia has similarly seen a fortification boom. Customarily, Indonesian mothers feed babies porridge made from rice and rice flour, bananas, papayas, beans, and vegetables (Komari 2000). Following research done elsewhere, Indonesian scientists started to examine such food in terms of its micronutrient makeup, and many concluded that these homemade foods for infants did not meet micronutrient requirements (Komari 2000; Ministry of Health 1999). Indonesian mothers' ability to prepare "good" baby food at home increasingly became suspect, and commercial baby food emerged as the ideal alternative.

If homemade food is the common icon of love and caring, new science paints a starkly different picture. Summarizing the newfound virtue of commercial baby food over homemade food, Indonesia's leading nutrition experts called for a "new paradigm of baby food" in a 2005 report:

The new paradigm affects the common or existing concept of complementary food for infants and young children. The old paradigm stated that there was no difference between home-made complementary foods and commercial or factory-made complementary food. The new concept reveals the significant difference between the two complementary foods, especially in terms of micronutrient content and bioavailability. (Soekirman et al. 2005, 31)

Seen through the "new paradigm" of nutritional science, homemade baby food now stands as the icon of inferior quality and unenlightened feeding practices, an antiquated paradigm to be cast off for the celebration of the commercial alternatives.

Experts' shifting technical assessments led to material changes on the ground. Persuaded that smart baby food was the next big thing, the government and international organizations started fortification projects for babies and mothers in Indonesia. For instance, the World Food Programme started targeting mothers and infants in the distribution of fortified cookies and instant noodles. Other organizations, such as International Relief and Development, Land O' Lakes, and Helen Keller International started distributing fortified products to infants, mothers, and children. The Indonesian government also started a nutrition program called MP-ASI, the Indonesian abbreviation for "complementary food to mother's milk," using an instant baby porridge fortified with micronutrients. In 1999–2000, the government spent Rp 30.9 billion, about \$3.4 million, for MP-ASI, and in 2003–4, Rp 120 billion, or about \$13.3 million (Soekirman et al. 2005). This ongoing MP-ASI project has become a centerpiece of their nutrition program, constituting a significant bulk of the 2003–4 nutrition-related budget of the Indonesian government.

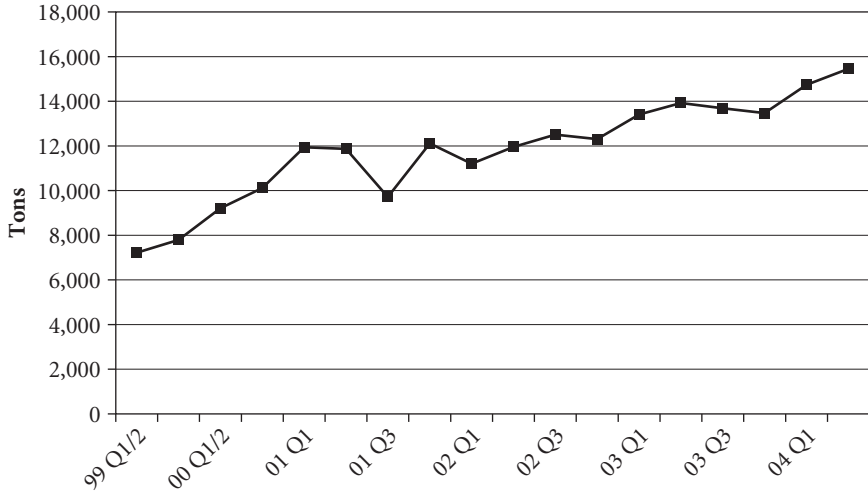
Who benefits from this “new paradigm”? What are the implications of these public endorsements of commercial baby food? While the government and non-profit institutions emphasize babies as the beneficiaries and the scientific virtues of these projects, the partner in this endeavor—the private sector—cannot be erased from the picture. The baby food market has moved beyond the Western capitalist states (Dunn 2004) and is growing at an impressive rate globally. Even in the developing world, the commercial baby food sector has a strong presence. The Indonesian baby food market epitomizes the spatial expansion of the baby food market and its increasingly powerful presence in the daily lives of families in developing countries. Indonesia’s precise market size is unknown, but it was estimated in 2011 to be \$136 million in annual sales (IRIN News 2011). Between 1997 and 2004, the market is said to have grown by approximately 90 percent (fig. 6.1; also see INSTATE Pty Ltd 2003; Indofood 2003). There are a variety of products in the Indonesian baby food market, but the market mainly consists of starter formula (0–6 months), follow-on formula (6–12 months), growing-up milk (1–10 years), milk for pregnant and lactating women, cereals/porridges, and special products for lactose low/free diets and for babies with low birth weight. The main products in the market in terms of volume are follow-on milk, growing-up milk, and cereals/porridges.

The majority of the companies in the business are foreign owned or multinationals, and major global corporations such as Nestlé and Nutricia compete in this market (fig. 6.2). For instance, the top player in the Indonesian baby food market is an Indonesian company called Sari Husada under Nutricia in the Netherlands (now a subsidiary of Danone). Essentially, two big players dominate the country’s market—Sari Husada and Nestlé. Indonesia is an attractive market for these companies due to the large population of babies and mothers. As one of the businessmen whom I interviewed told me, it is a market of four million babies per year. Therefore, it is not surprising that Indonesia is one of the targeted growth markets (Madden 2003).

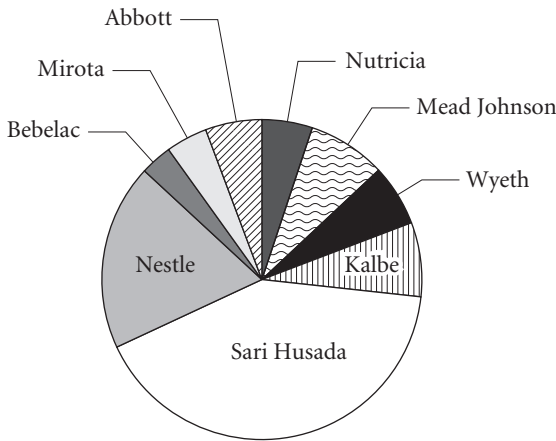
For these companies, the public and nonprofits’ use of fortified baby food has been a financial boon. For instance, the government baby food program used baby food made by Gizindo-Kalbe Farma, which is a subsidiary of the food conglomerate, Indofood. The company was quite straightforward about the business benefits of the government food aid, as it reported to its investors in its annual report:

Two years ago the timing of the resumption of aid-related contracts resulted in only 3 months of aid-related sales as the Government continued to support improved infant nutrition in Indonesia. In 2003, however, a full year of this business resulted in substantial growth in volumes and revenues. (Indofood 2003, 30)





**FIGURE 6.1.** Indonesian baby food market, 1999–2004.  
Source: APMB.



**FIGURE 6.2.** Indonesian baby food market share, 2003.

The public commitment to fortified baby food had benefits beyond such direct profits, however. Highlighting the longer-term investment value of public endorsement of commercial baby food, Indofood continued as follows:

*One of our main challenges is the conversion of aid-related customers into the habit of buying our commercial brands as family incomes improve. Aid agencies estimate a constant 30 million people below the poverty*

line in Indonesia for the next 10 to 15 years and our capacity gives us an advantage in securing more of this business in the future. (Indofood 2003, 30; my emphasis)

If nutritional scientists and bureaucrats thought that food aid would add micronutrients, the industry thought about adding future customers, as well as immediate “volumes and revenues.” For the industry, the value of public endorsement of fortification lies at multiple levels, first in the form of direct monetary gains but also in the expected conversion from “food aid recipients” to “customers” via the process of habituation of buying and eating commercial products.

The new paradigm of baby food has introduced mothers to not only the new expert assessment of nutrition and food but also to a world in which the private sector’s calculation of growth and profitability figures prominently in how they care for their children. On the one hand, smart baby food has been touted by the national and global scientific network as a more enlightened way for mothers to feed children. On the other, it has opened up the door of financial opportunity for the global baby food industry, with its calculations of profitability and business opportunities that are separate yet overlapping with scientific judgments.

## The Role of the Market

Ibu Lis is thirty-five years old and has three kids. She has an elementary school education and lives with a husband who is a *becak* (cycle rickshaw) driver in Jakarta. Like the house of Ibu Eti, her shack is dilapidated with no major furniture inside the dark room except for a mattress. Although she does not have what many might consider more basic necessities such as a decent bathroom and kitchen, prominently sitting in the middle of the room are a TV and a DVD player, which she got “on credit.” When I ask her what she feeds her kids, she talks about various commercial products such as Promina and Nestlé and says she likes them because they are nutritious. I ask how she knows they are nutritious, and she says it is written on the package and also points to the television and says “advertisements.”

Like Ibu Lis, other poor women whom I interviewed talked about the influence of advertisements on their feeding practices. If scientists and policymakers are emphasizing the value of micronutrients and commercial products as superior alternatives to homemade baby food, how does it relate to the marketing undertaken by the transnational baby food industry? What kind of story does it tell consumers? How do these corporate actors talk, preach, and relate to mothers in developing countries? Here I look at the Indonesian baby food market and

how its marketing strategy has shifted. I sampled advertisements in a parenting magazine called *Ayahbunda*. It is a monthly parenting magazine written in Bahasa Indonesia. It has the longest history of the existing parenting magazines in the country, allowing for historical comparison of advertisements.<sup>4</sup> *Ayahbunda*'s readership is upper middle class, but from it one gets an idea of the advertisements by major baby food companies available in the Indonesian market, which are also seen in other media, such as TV, billboards, and in-store promotional materials that even the poor like Ibu Lis see everyday.

I found several salient themes in the 2005 issues of *Ayahbunda*. Most notable was their emphasis on nutrients and the benefits linked with a particular nutritional element. The most prevalent benefit featured both in text and images was the child's intellectual development. The main texts of ads emphasize intelligence as the biggest benefit of using the products. Images in the ads strongly emphasize the intellectual benefits by featuring children engaged in activities that seem to require brain power, such as children with objects associated with intelligence—complex toys (Dancow, 2005; Nutricia, 2005), computers (Procal Gold, 2005), and artifacts presumably made by the children themselves (Chil-kid, 2005; Enfagrow, 2005; Nutrilon, 2005).

In addition to the message of intellectual benefits associated with the use of the products, the 2005 ads tended to have a specific nutrient associated with each health benefit. Many established causality between a particular nutrient and a particular health benefit. For instance, the Milna biscuit ad claims DHA is “to help brain development,” Prebio is “to increase body defense,” and calcium is for “the development of strong bones and teeth.” Gain Plus claims “three prime benefits” that include brain development from DHA, GLA, and taurine; bone and bone density from non-palm oil and calcium; and body resilience from synbiotic. Triple Care similarly touts three benefits, including brain development from omega-3, -6, and -9; body resilience from beta-carotene, vitamins C, E, and B<sub>6</sub>, and zinc; and improved digestion from fiber.

In order to identify the historical changes in the marketing strategies of baby food, I compared advertisements in 2005 with the oldest ones that I could find in *Ayahbunda*—from between 1979 and 1989 (summarized in table 6.1). Contrasted with the older ads, the emphasis on micronutrients and specific health benefits in later ads becomes very clear. Older advertisements were not silent on vitamins and minerals. Many of them mentioned vitamins and minerals in addition to proteins and calories. However, the major difference between the earlier ads and the 2005 ones is that while the overall message of the older ads focuses on children's growth and development, the more recent ones focus on nutritional components and their benefits, and on the complex engineering that is required to obtain optimal nutrition for babies.

In contrast to specific nutritional benefits in the more contemporary advertisements, the older ones emphasized children's growth as the central message. The image of a growing baby appears in various parts of the ads but figures most strongly in the main text: "healthy and happy growth" (Morinaga baby formula, 1979), "important for baby's healthy growth" (Vita rice flour, 1982), "nutrition for the growth of your children" (Proteina cookies, 1984), "healthy growth, growth to win" (Bendera formula, 1984), "Mil porridge for good growth" (Nestlé porridge, 1985), "Milna always cares about our babies' growth" (Milna porridge, 1986), "help baby's healthy and complete growth" (Farley porridge, 1986), "milk for our baby's growth and development" (Promil formula, 1986). The images in the ads reinforce this message. In addition to babies that are being fed, images of strong and active children are prevalent, including children holding giant stuffed animals (Nutrima, 1989), holding up training weights (Farley's, 1981), or being active in sports (Bendera, 1984; Sustagen, 1979). The older ads also emphasize additional benefits such as convenience, taste, and flavors.

This observation of the differences between earlier and contemporary ads is supported by a comparison of the same products from the same manufacturer over time. For instance, ads for Nestlé's Dancow milk in 1981 and 2005 reveal striking differences in their message over time. The ads in 1981 only talked about convenience and taste:

Now Dancow Instant—delicious, from pure and fresh milk. Quickly—yes, in only 4 seconds Dancow Instant, rich in vitamins, can dissolve in cold water. Moreover, the taste is soft, white as snow. Soft and fresh—your children and family certainly will like it. No clumps. No waste. Dancow Instant—milk in 4 seconds.

In 2005, the advertisement for the same product emphasized the components and their specific health benefits:

Dancow 1+, now more complete with DHA. Dancow 1+ is now not only giving protection with Prebio 1, which helps to protect digestive system, but is also complete with DHA, which is important for the brain. Dancow contains one of the highest amounts of DHA of all growth milk products.

The 2005 Dancow ad shows a picture of a girl whose brain is glowing as she plays with a complicated toy. The package now emphasizes nutrient components (DHA, Prebio 1, LA, ALA, and 26 vitamins and minerals), each with a specific composition. Each nutrient is checked with a  $\checkmark$  symbol, inviting consumers to feel that all the necessary nutrients in the right amounts are in the product.

The text of the ad links a particular nutrient with a particular health benefit, such as Prebio 1 for digestion and DHA for brain development.

Thus nutritional makeup and its efficacy play an increasingly important role in more recent marketing. The 2005 ads portray the food for mothers' and children's needs as having a variety of nutrient components, each of which is specifically linked to a particular health benefit. The appeal to consumers is based on specific nutrient needs for specific health benefits, rather than the general "growth and health" appeal of the older advertisements. The important implication of this micronutrient emphasis is the necessity of expert intervention. The marketing messages construct the needs of babies as a complex amalgam of micronutrients, which then suggest the necessity of sophisticated engineering by experts. Therefore, they position professionals and experts, presumably at corporate laboratories, as superior providers of nutrition. Mothers are then framed as responsible for buying those products in order to be good mothers. For instance, an advertisement for EnfaMama highlights such mothers' responsibility by saying:

For a new baby, I don't compromise. A healthy and smart baby is not just born. Mothers don't want to compromise during pregnancy and breast-feeding, because they play an important role. EnfaMama is complete with 65 mg of DHA and omega-6. DHA is clinically proven to help a fetus's brain development. Your sweetheart starts smart since birth, you don't want to compromise.

Peppered with numbers ("65 mg") and scientific names of nutrients ("DHA and omega-6"), this advertisement deploys the full force of scientific authority ("clinically proven") to imply that not buying the product is tantamount to an unacceptable "compromise" that results in suboptimal development of one's child.

Scholars have documented that the growth of nutritional science and the accumulation of findings in related disciplines have been accompanied by an influx of astute corporations that have translated science into purchasable goods and services (Apple 1987; 1996; Parkin 2006, chap. 6). Indeed, the history of baby food reflects the modernist march of capitalism to the drumbeat of nutritional science. The Indonesian case described here also attests to the continuous refinement of corporate marketing in using the latest scientific benefits to appeal to mothers and capitalizing on women's guilt and fear. The changing and growing demands of scientized feeding construct the industry as the best equipped to serve the needs of babies with their expertly configured, professionally produced, and scientifically endorsed "smart" products. It would be a grave "compromise," mothers are told, not to use these products.

**TABLE 6.1** Comparison of baby food marketing strategies, 1979–2005

	1970S–1980S	2005
benefits of the product	helps growth (of body weight) and builds strong bodies	specific health benefits (brain growth, body defense against disease, digestion, etc.)
nutrient advertised	emphasis on protein, frequent mentioning of carbohydrate	DHA, vitamins, and other micro- and macronutrients
food purpose	energy for growth	delicately engineered to optimize bodily/mental functions
appeal to consumer	health	optimal health

## Interviews with Women: “Needs” for Nutrition in Poverty

When the experts and corporations are sending messages that focus on the nutritional makeup of food and the functional advantages of nutrients delivered via commercial products, how do people interpret it? Merely describing advertisements is not sufficient because consumers are active participants in this commodified communication, and their agency has to be brought into the picture. In an effort to uncover the lost voice of women, albeit partially, I interviewed Indonesian women.<sup>5</sup>

I chose thirty-nine mothers in urban slum areas. I selected poor families for several reasons. First, poor women are the most frequent objects of interventions in the official and scientific discourses. It is poor women and their children that nutritional experts and policymakers consider as the primary beneficiaries of micro-nutrient policies. Second, at the same time, we could expect that poor people are the least likely users of the commercial products—particularly when the products are substitutes for their own breast milk, which is available for free. These are also the people who we tend to assume are the least likely to be exposed to nutritional science. Therefore, I wanted to see how these least likely consumers of nutrition messages were responding to the recommendations for commercial products. If they were buying baby food products despite their economic limitations, they must have had strong reasons. For the same reason, I focused on stay-at-home mothers rather than working mothers, since the latter had real reasons to use commercial products instead of breast-feeding. I also focused on the poor because of the obvious political and social implications of their dependence on industrial food.<sup>6</sup>

Wanting to see nutritionism from the perspective of women’s lives and lived experiences, and being aware that a rigid questionnaire was likely to reflect my

theoretical and cultural biases, I asked broad questions to elicit the women's own narratives. I typically started by talking about myself and said I wanted to hear about the interviewee's experience as an expert. I did not have kids then, so I would mention that I did not have children and thus I was there to learn from them. Then I asked about their families, food, cooking, and their feeding practices. I also asked their opinions about food aid, such as that from the WFP and the government.

When I asked them about the general food security situation, economic difficulty emerged as the biggest concern. Many women's husbands did not earn a stable income. Cash was always in short supply. Their living conditions were destitute. I went to many quarters that had just been under water from seasonal flooding that had left garbage and puddles of dirty water all over the place. When I asked them about the food situation, they tended to link it with this general condition of poverty.

For food, we don't care about nutrition. What's important is there is protein, and kids become full. So the issue is different. For middle to upper class, they might think about nutrition and health. We don't think about health, nutrition, because nutrition is expensive. (Interviewee 146)

For us, for people whose conditions are rather difficult, [we eat] whatever there is, whatever we can afford. Whatever is cheap. Mostly the problem is money. We don't think about nutrition. Whatever there is. Whatever is welcome. We don't think about nutrition. If we had more money, we would buy something nutritious. (Interviewee 168)

I was surprised, therefore, that even within this poverty, many women tried to buy commercial baby food products. Ibu Eti, who begs on streets, is one of them. The most popular products used were instant porridges for babies, such as Promina and Nestlé. Promina is a powdered rice flour produced by Indofood. Nestlé is a similar product produced by Nestlé. Some women did use formula milk and follow-up milk, or milk for pregnant mothers. Interviewees who did not use these products regularly had at least tried them. Those who did not use them regularly had had to stop because their babies did not seem to like the products or because the product was too expensive, but they emphasized that they had tried.

In parallel with the results from a variety of other surveys done in Indonesia, I found that most of the interviewees did not exclusively breast-feed for six months as recommended by the health authority. Most of them did breast-feed but started feeding non-breast milk at an earlier stage than recommended. Some of them fed their babies homemade porridge, bananas, or honey water. But many of them used commercial products.

When I asked why they bought commercial baby food products, interviewees provided complex reasons for their decisions, such as convenience, hygiene, and affordability. The most popular product type, the instant porridge (Nestlé, Promina, SGM) is considered convenient and easier to prepare than traditional porridge, which might take thirty minutes to prepare. The porridge is also affordable. A pack of 20 grams sells for Rp 1,000 and can be bought in the neighborhoods at small vendors without traveling far. You need only open a pack and stir in hot water to make it. Another reason given was hygiene. Food vendors sell porridge, but it is seen as potentially unhygienic. Some interviewees also said that health workers or midwives recommended the products or gave free samples, which could also be a motivation for continuing to use the commercial products.

Nutrition, however, was many interviewees' first reason for purchasing baby food products. As we have seen, many products feature nutrition benefits in their advertisements. The products that they used most—Promina and Nestlé—were similarly advertised with nutritional claims, such as that they contained “iron, iodine, high protein and EFA linoleat.” Although many interviewees did not remember the exact nutrients that they were attracted to, they suggested that the nutritional value of these products held great importance for them.

Products like that, Promina and Dancow, have vitamins. What's nutritious is Promina and Dancow. That milk is highly nutritious. The effect on that baby is good. That's Dancow. (Interviewee 144)

[I buy them] for the child's brain. That is it. I want my kids to be smart. So I buy them although they are expensive. (Interviewee 145)

I want the kids to be healthy. If you drink Dancow milk, [the child's] growth is fast. It's good. (Interviewee 139)

They make kids big. And help nutrition. That has vitamins, DHA. (Interviewee 141)

We want them because we see that the nutrition is better compared to regular food. (Interviewee 154)

My husband thinks that our child is very small. So to help his appetite, we give him vitamins, [we] give this [Nestlé, Dancow]. He is so small, and to make him fat, to help his appetite, we try this milk. (Interviewee 164)

These women had gotten an impression of the nutritional superiority of these products mainly from TV advertisements, talking to other mothers, and seeing product packages. The role of television was particularly important, and most interviewees had some access to, if not ownership of, a television. Even in very



impoverished households, like that of Ibu Lis, there was a TV. They also read the product packages, although not the details of the nutrition labels. They tended to point to catchy logos of “DHA,” “iodine,” and “Prebio” on the packages.

Does this mean that women are duped by the marketing strategies of corporations? Or does this mean that women’s “needs” are met by the “smart” baby food? My interviews suggested a much more complex picture of women’s experience of nutritionism. Three themes emerged from the interviews. These women were receiving contradictory nutrition information from advertisements and other kinds of knowledges (conflicting nutrition knowledges). They also believed that nutrition is expensive because of their awareness of baby food products, most of which are unaffordable to them (nutrition is expensive). Therefore, they want to at least try the products if they can afford it (try it if you can). I will discuss each theme in turn.

## Conflicting Nutrition Knowledges

While all of the mothers and family members who I interviewed used baby food products, they did not forget to tell me that they were aware of noncommercial types of nutritional information. They emphasized that they knew advertisements were advertisements and that they took them with a grain of salt. Many of them also noted that they were aware of nutrition in natural, noncommercial food such as vegetables, fruits, and meat. For instance, when I asked them what they considered as nutritious food, many of them said vegetables, meat, eggs, and fruits. Several of them recited the old-time slogan of “four is healthy, five is perfect” (*empat sehat lima sempurna*) that recommends staple (carbohydrate), side dish (protein and fat), vegetables, fruit, and milk. This was the old government nutrition education slogan used for several decades. Breast milk had even more strong support from the mothers. All of them knew that breast milk is nutritious and best for infants babies, and no one denounced breast milk. Many of them had heard recommendations of breast milk from midwives and health volunteers.

On the other hand, they were exposed to many advertisements on television. Many said they received nutrition information from advertisements. One interviewee commented:

I am a layperson. Do not know much. I get information from *posyandu* [community health posts] when weighing [babies]. And also on TV there are many advertisements. This product is good, that product is good. I don’t know. From TV, that’s it. (Interviewee 144)

As we saw, advertisements for baby food products often focused on fortified nutrients. Mothers therefore learned that omega-3 is good for the brain, beta-carotene is good for the body's resilience, or Prebio 1 is good for digestion primarily from TV ads. Suggesting the necessity to purchase products in order for people to get nutrients, advertisements shake mothers' confidence in regular food as a source of nutrition. Consequently, women are getting contradictory information and images of what nutritious food is.

Faced with contradictory information, many resolved the tension by arguing that baby food products are used only as a "side dish," an "addition," or a "variation" to "the normal food" or breast milk, which are recommended by official science. Many interviewees who used formula milk insisted that it was only to "add variation" or to "add to breast milk," rather than to replace breast milk. For instance, the mother who used infant formula and porridge from the time the baby was three months old said, "What's good is breast milk. That time [when babies are small], breast milk is better. It [formula milk] is only a side dish" (Interviewee 171).<sup>7</sup>

But, at the same time, some of the women had started to doubt the virtues of noncommercial alternatives in their particular conditions. For instance, interviewees knew about the medical recommendation for breast milk. Many of them repeated the phrase "breast milk is the best." However, some revealed deep concern for the quality of *their* breast milk. As many of them are poor, they believe that they don't eat enough nutritious food. They are told by health institutions to have confidence in breast milk as the perfect food for babies, yet they wonder whether that is only the case for the rich class of mothers.

People in lower class actually...food is not nutritious. I eat little vegetables, little vitamins. Automatically, my breast milk for the baby is also not nutritious. So you need help by these [products]. (Interviewee 141)

Sometimes, I am tired from work. Sometimes I don't eat too much, because I am busy. Then breast milk automatically decreases. If I am tired, breast milk is not enough. So I add SGM. (Interviewee 174)

Furthermore, health institutions can give contradictory messages about where people can get nutrition. Although many have heard that natural food can give nutrition and vitamins, the understanding of the term, "vitamin" is rather medicalized, strongly associated with supplements. Vitamin A distribution for children under five was started in the 1970s by the Indonesian government. Given the long history of the program, it might not be surprising that interviewees tended to equate the word "vitamin" with vitamin A capsules that

they received twice a year for the children. When I asked “from what do you get vitamins?” a frequent response was “from *posyandu* and *puskesmas*.”<sup>8</sup> Another frequent answer to the above question on the source of vitamins was commercial vitamin syrups such as Biolysine and Sakatonik. The women explained that they were advised to buy these vitamin syrups when their children were sick or underweight to help increase appetite.

On the one hand, women knew that breast milk was good and vegetables and other regular foods were nutritious. On the other hand, they had a medicalized image of vitamins and thought micronutrients had to be supplemented as specialized products. Women’s understanding of nutrition is hence quite conflicted: while the former knowledge might affirm that commercial food is unnecessary, the latter undermines such understanding.

## Nutrition Is Expensive

When asked about their general food security situation, the interviewees said that economic difficulty was the biggest obstacle in obtaining nutritious food for their families. They believed that they could not afford nutritious food in general and expressed feelings of deprivation. Although there are affordable foods that are nutritious, such as vegetables and tempeh, and they are accessible and sold in their neighborhoods, many women tended to link “nutrition” with something they could not afford.

[The problem of getting nutritious food is the] economic difficulty. We want to buy nutritious food, but nutritious food is usually supermarket price. Sometimes we go to supermarket, but prices are high. (Interviewee 147)

If I had more money, I would give my children food with vitamins. The nutritious ones. I mean, we don’t have enough of it. We get milk only sometimes. I don’t have much money. I buy milk, and that’s it. Very limited. I mean, not much money.

If you don’t have money, you cannot buy anything. If I had money, I would buy food with vitamins, nutritious food. (Interviewee 144)

This theme, that nutrition is expensive, emerged perhaps because there was an increasingly strong sense that in order to “get” nutrition, you had to buy commercial products. Exposed to many advertisements, the women shared the sense that nutrition and vitamins are something rarely affordable to the poor. In the words of one woman, “The obstacle is money. If there is money, buy [nutritious food]. If there is no money, don’t buy [it]” (Interviewee 169).

Nutritionism seems to accelerate their frustration by implicitly sending the message that in order to feed kids well, they have to purchase products. One needs a lot of cash to get nutrition because it is equated with buying nutrients. Echoing the message in advertisements, the ability to be a good mother is dictated by one's cash flow.

## Try It If You Can

Women told me that they knew that regular foods like vegetables and fruits were nutritious. However, commercial nutrition information made them think it was necessary to buy products. Yet many products are beyond their purchasing power. This creates a sense of deprivation and paradoxically prompts a particularly strong desire to at least try products when their price seems more affordable. It was surprising to learn that many of these women knew a variety of products on the market, although they themselves could not afford them. Many of them could recite many product names in each category. For instance, if I asked them about cookies, they could talk about Milna and Sun. They knew Laktamil was for pregnant women. They knew many brand names of formula for babies as well. Furthermore, many of them knew the relative prices of products, telling me that product A is more expensive than product B, and that B is about the same as C. It was obvious that they knew of the existence of many product choices out there and carefully compared prices and affordability, eyeing the possible purchase.

Since many of the products are prohibitively expensive for the poor, the women's eagerness to participate in the market was strong when there were affordable products. A good example was the prevalent use of instant porridges like Promina and Nestlé. Many interviewees who used these instant porridges said that what they actually wanted to try was formula milk. However, formula milk tended to be more expensive than porridge. Porridges were sold at Rp 500–1,000 per sachet, while formula milk could be more than Rp 20,000 for a box, and it was not sold in a smaller quantity. For instance, one interviewee only used Nestlé and Promina porridge and Sun cookies. She had tried SGM and Sustagen formula milk but said she stopped because they were too expensive. Noting that these products “make children smart and are good for brains,” she said those products “were good” but “the price was also expensive.” Another interviewee, who had a two-year-old child, wanted to give the child formula milk but thought that the price was too high. She explained, “When fed with these products, children get fat fast. And growth is fast. Intelligence is good. If you drink this milk, you become smart. But we cannot afford it” (Interviewee 139). So she decided to at least buy the more affordable instant porridges.

Another interviewee put it this way:

First is from curiosity. First was curiosity. Second, milk adds nutrition for children in addition to vegetables. I want to try it. Also at school they say that milk is necessary to make kids' IQ high. There is an IQ test, and we buy milk to increase the score. Just want to try. (Interviewee173)

Explaining that she just wanted to try because of benefits they saw in ads, the interviewee epitomizes many mothers' desire to buy if possible.

In summary, the interview and advertisement analyses provided a window into a complex world of feeding that mothers are faced with. The food industry markets their products as highly nutritious and functionally beneficial to children, often implying a responsibility and obligation to buy them to be a good mother. Interviews with the mothers also showed that advertisements created a deep ambivalence about breast milk and the allure of commercial products. Emphasizing the necessity for micronutrients in expertly manufactured products, ads seem to have created confusing terrain as to mothers' understanding of how and from where to get "good" food. Experiences with medical institutions and government programs reinforced the association of nutrition with commercial products. Women tended to lose their confidence in their breast milk, worrying about poverty's impact on it, which increased their desire to buy these commercial products. Catchy ads on nutrients and their benefits have thus created the strong yearning to buy commercial fortified products. Despite their poverty, many mothers at least try to feed these products when the situation allows.

Experts are increasingly worried about the micronutrient status of children and have come up with specific instructions for mothers to fulfill the micronutrient standards. A woman is told to breast-feed and not to add anything until her child is six months old. Yet after six months, she needs to buy properly fortified products because she probably cannot cook micronutrient-rich food for her child. Although this instruction might make perfect sense from scientists' point of view, it would be easy for anyone, let alone poor mothers, to fail to follow it. As any mother who has nursed her baby knows, breast-feeding is difficult to manage and physically taxing. In addition, poor women have reasons to think that their breast milk might not be enough for the baby. At the same time, commercial products tout great nutritional benefits that a woman might be tempted to try if she has an opportunity. In addition, nutritional claims are abundant in processed food products, making it difficult to distinguish what is properly fortified and what isn't. Furthermore, while women rarely encounter health workers who reinforce correct instructions, they are bombarded with confusing advertisements.

The expert discourse tends to hold mothers accountable for failing to follow scientific guidance. Experts lament that mothers do not breast-feed exclusively,

introduce non-breast milk too early, buy wrong products, or cook food that is insufficient in micronutrients. But as the interviews showed, women are desperate to feed their children well. It is just difficult to do it for mothers when they are so impoverished. Many mothers pointed out poverty as the main concern even when I was asking about food and nutrition. Ibu Eti summarized the food problem: “For me, the problem is economy.” Yet in the nutritional discourse of experts, it is rarely poverty that is the focus. Rather, it is nutrients and mothers who fail to deliver properly to their children. Shifting the focus from poverty and marginality to the matter of micronutrients, they effectively (albeit subtly) frame mothers as the source of the problem. Yet ironically, while the food industry floods women with advertisements that effectively build up the allure of their products by working on mothers’ insecurity and desire, they are not problematized by the scientific experts who are primarily concerned with micronutrient, not a broader cultural and social environment in which women make their feeding decisions. Instead, the industry emerges as the significant partner in combating hunger and malnutrition because of its expertise in adding nutrients during processing.

## **From Villains to Saviors: Changing Politics of Baby Food**

Several decades ago there was wide circulation of news stories about formula milk causing declining breast-feeding in developing countries. In the 1960s, the distribution and marketing of baby food and infant formula in developing countries by global food manufacturers invited much criticism from nongovernmental organizations, inspiring a global social mobilization against them. Corporations like Nestlé were called “baby killer,” and they became the targets of transnational protest. Social movements pointed out that these multinational corporations aggressively marketed their products to developing countries with ethically questionable methods (Baumslag and Michels 1995, 154). They marketed formula where the necessary infrastructure to use them safely was lacking. Many mothers had to rely on dirty water to dissolve infant formula, making babies sick. The marketers of these products were often dressed like medical professionals, emphasizing the appeal of modern science to consumers. In some cases, medical professionals were paid to sell these products to their clients at hospitals. Corporate advertisements often compared breast milk and formula milk, falsely claiming the superiority of the latter over the former (Baumslag and Michels 1995; also see IBFAN website at <http://www.ibfan.org/fact-nestle.html>). By the early 1980s, there emerged a strong international movement against formula and baby food manufacturers, with the founding of organizations such

as the International Baby Food Action Network (IBFAN) and the International Nestlé Boycott Committee. In response, WHO and UNICEF sponsored a codification, the International Code of Marketing of Breast-Milk Substitutes, which was approved by the World Health Assembly in 1981 (Sikkink 1986). The code attempted to regulate the marketing of formula and to promote breast-feeding by prohibiting, for instance, the use of formula company employees in prenatal education or the use of incentives to sell formula products.

Set in this historical perspective, what is impressive about the current “smart” baby foods is not so much the different nutrients added to them but the different cultural imagery. Unlike in the earlier period, when public health advocates were at war with global capital, smart baby food now enjoys the former’s endorsement. This is a critical shift in the contentious politics of global food. The multinational corporations are now expected to contribute to, rather than undermine, the public health objective of infants’ and children’s health. As a publicly sanctioned hidden hunger strategy, smart baby food has achieved a subtle but profound change in the image of baby food manufacturers.<sup>9</sup>

Yet the ethics of baby food and formula marketing in developing countries is not only a concern of the past. Despite the establishment of the International Code of Marketing, for many breast-feeding advocates, the battle against baby food manufacturers in many developing countries is not over. Breast-feeding is far from optimally practiced, and companies have found many loopholes in regulations (IBFAN 2004). Even today, one of the most active campaigners, IBFAN, issues papers full of reports of violations of the code by corporations in developing countries.

Indonesia’s politics of baby food resembles trends elsewhere. When the “baby killer” scandal broke out in the 1970s, the Indonesian government responded to the global concern and adopted a series of regulations to curtail infant formula marketing. In 1975, Indonesia’s Ministry of Health issued regulations prohibiting advertisements for infant formula in maternity centers, hospitals, and other health service outlets. After the International Code of Marketing was adopted, the government issued a regulation in 1981 that prohibited television advertisements for infant formula (Office of the Minister of State for the Role of Women 1990) as well as several decrees to regulate labeling and promotion of breast-milk substitutes.<sup>10</sup> A regulation on advertisement and labeling was reissued in 1999,<sup>11</sup> which banned the promotion of baby food in mass media.

Despite the existence of these regulations, their actual enforcement has been quite limited (Utomo 2000). Marketing tactics that are banned by the code and other domestic laws are rampant in practice. Many observers have attributed the growth in sales of baby food in the past several years in Indonesia to aggressive marketing tactics (see, e.g., reports in Jakarta Post 2001a, 2001b, 2001c).<sup>12</sup> My

interviews with experts also confirmed that the violations are widespread, with the government being unable to crack down on them due to lack of resources (see also BKPP-ASI and YASIA 2003; Utomo 2000). Some even said nostalgically that the situation was better during the New Order when the government was stronger. It is a sad irony in food politics that an authoritarian regime might be better able to enforce compliance with food regulations.

Moreover, various studies in Indonesia have indicated that the rate of breast-feeding is less than ideal. Many Indonesian mothers are not following the WHO/UNICEF guidelines of six months of exclusive breast-feeding and are introducing solid food too early or not breast-feeding at all. For instance, the National Household Survey in 2001 (Government of Indonesia 2001) shows that only 47.5 percent of newborn to three-month-old babies and 14.2 percent of four- to five-month-old babies were exclusively breast-fed. Another government source, the Demographic and Health Survey, showed similar numbers. A report by a NGO has found that only 37–41 percent of children less than two months old were exclusively breast-fed (de Pee et al. 2002). A smaller interview survey found that only 25 percent of mothers did exclusive breast-feeding for the first six months (BKPP-ASI and YASIA 2003). I do not intend to assess which of these data are more accurate. What is important here is that these statistics indicate that the reality is far from what is considered ideal. A number of health and breast-feeding experts in Indonesia whom I interviewed thought that even these surveys are overestimating the amount of breast-feeding.

If mothers are not following the six month exclusive breast-feeding rule, what are they doing? The results from the surveys indicate that many babies are fed with food and liquids too early. Many mothers introduced complementary foods before the recommended age of six months. To be sure, the introduction of food and liquid at an early stage of life can be seen as a long-standing custom (Nain and Maspaitella 1973; Hull 1979; Arnelia and Muljati 1993). Deciding that commercial products are responsible for the low rate of breast-feeding might seem premature. The growing trend, however, is that many mothers are using infant formula and commercial baby food. Helen Keller International reported in 2002 that many babies were fed with commercial instant baby food prematurely. Studies in other countries that analyze the reasons for declining breast-feeding practices also point to the influence of advertisements for baby food (see, e.g., Igun 1982).

Set against the continuing struggle over breast-feeding, the smart baby food endorsement from experts seems puzzling and profoundly contradictory. On the one hand, the experts have been concerned with declining breast-feeding and have tried to institutionalize various measures to convince women that commercial products are no better than breast milk. On the other hand, a newer



discourse emphasizes the superiority of commercial products in terms of nutritional contents. In this confusing terrain of scientized motherhood in developing countries, it is the corporations that surely stand to win. Not only do corporations skim profits from public procurements, they can also proclaim their positive role in the health of babies in developing countries, refashioning themselves as the saviors, rather than killers, of babies in the Third World.

## The Nutritionalized Self

Anthropologists have found that food often produces anxiety. Violating the cultural boundaries between pure and impure, nature and culture, human and inhuman, and life and death, food is full of ambivalence and contradictions (Levi-Strauss 1983; Douglas 1966). While one might expect that the “rational” perspective of nutritional science might reduce such anxiety, historians of food have found that this is not the case. As Harvey Levenstein (2003, 256) notes, “generalized anxiety” about food and nutrition is pervasive, and often aggravated by fluctuating and contradictory nutritional messages that frame food as a health risk.<sup>13</sup>

Gyorgy Scrinis’s (2008) concept of the “nutritionalized self” echoes such a paradoxical increase in concern about food—even with or rather because of nutritional science. With this concept, he discusses the thrust for self-regulation and monitoring imposed by nutritional science. The concept describes eloquently how people have changed their relationship with food. We are perpetually worrying about the adequacy of our vitamin intake, taking multivitamins, jumping into new superfoods, and following news reports about scientific findings on micronutrients. The rise of nutritionism is accompanied by consumers who scan food from a nutritional perspective, avidly consume nutritional information, and modify their food choices according to the nutritional characteristics of products. It is not only the government, scientists, and corporations that have come to embrace nutrition as the primary parameter for food, eating, and feeding. Nutritionism has taken hold of the popular imagination, and the pervasiveness of the language of nutritionism in every corner of society, and in one’s sense of self, is quite remarkable.

The concept of the nutritionalized self is useful in understanding the growing power of a nutritional perspective in shaping people’s subjectivity in relation to food, but it would be misleading if it implies that all individuals are held responsible for nutritional well-being in the same way. This is not the case. Women—particularly as present and future mothers—are under more stringent scrutiny. Their cultural standing as mothers makes it ever more difficult for

women to escape scientific scrutiny. In fact, nutritionism intersects with the modern ideology of motherhood, which prescribes that a mother must follow expert advice in order to count as a good mother. The theorizations of both Andrea O'Reilly (2004), on the ideology of "sacrificial motherhood," and of Sharon Hays (1996), on the ideology of "intensive mothering," acknowledge the increasing power of scientific knowledge and expertise in defining a culturally acceptable model of motherhood. For instance, O'Reilly notes that under the ideology of sacrificial motherhood, mothers need to be guided by expert instruction and scientific knowledge.<sup>14</sup> Good mothers are supposed to seek scientific wisdom on the psychological, physical, and cognitive development of their children. Nutritionism further accelerates such demands on women if they are to count as "good mothers."<sup>15</sup> Indonesian mothers whom I interviewed showed a similar pervasive censoring of self through the nutritional perspective. Indeed, what struck me during the interviews was that the mothers felt compelled to emphasize their knowledge of nutritional science. Mothers repeatedly deployed words like "vitamin," "protein," and "DHA" and recited the official nutritional slogans. Perhaps they did not understand scientific definitions, but they understood well the social and cultural value of nutritional jargon as indicating enlightened motherhood. In showing their familiarity with nutritional terms, they tried to impress on me that they met the requirements of good mothers.

It is precisely because of this gendered requirement that many corporations could use nutritional claims implicitly and explicitly targeted at mothers, capitalizing on their feelings of guilt, insecurity, and anxiety. As historian Katherine Parkin (2006) has shown, the vast majority of the food industry's advertisements have targeted women, particularly mothers, as the audience. Ads construct mothers as being in charge of nurturing and feeding children and family. It is motherhood, rather than fatherhood, that has been required to be scientized (Apple 2006) and commodified (Rothman 1989; Taylor, Layne, and Wozniak 2004; Paxson 2004). In the capitalist food system, the family nutrition is a mother's task that she should properly fulfill via the market.

The food industry is not the only actor that subjects mothers to strong pressure and tries to hold them accountable for the right purchasing decisions. Mothers' nutritional competence is also a concern for the nation-state. The nutritionalized self has a crucial link to what Nikolas Rose (2007, 24) calls "biological citizenship," in which "individuals themselves must exercise biological prudence, for their own sake, that of their families, that of their own lineage, and that of their nation as a whole". In being critically linked with neoliberalization, citizens' health and well-being have come to be matters of private accountability, with citizens refashioned as "responsible consumers" who must self-monitor their own bodily conduct. The concept of biological citizenship further mandates that

citizens aspire to biological self-improvement in order to enhance the vitality of the nation for the purpose of “development.” This requires women to be particularly prudent, because they are accountable not only for their own biological performance but also that of the future citizens. As Paxson (2004, 211) notes in the case of modern Greece, the government urges women to be proper “maternal citizens,” to “fully achieve ‘their biological mission’ as women and to reproduce for the nation.”

Indeed, in the everyday lives of the Indonesia women I interviewed, state policing regarding child nutrition seemed everywhere. For instance, children’s growth is monitored at monthly weighing session at *posyandu*, and if the children are underweight, local health workers mark the mother as the “mother of a malnourished child.” Such women might receive several visits by senior local women who act as local health workers and who will lecture them about nutrition and proper feeding. Local neighborhood festivals often have a little weighing table for babies, and officials nod approvingly if a baby is ahead of the official growth curve. The nutritional life of mothers has both economic and political values, and they are closely monitored and regulated.<sup>16</sup> Mothers are therefore constantly pressured to be nutritionally proper by both the state and the food industry.

Exposure to and familiarity with nutritional knowledge does not have to be negative; it can be empowering and productive. New knowledge about nutrition does excite people, and the “nutritionalized self” could be a site of desire and satisfaction. I have found myself taking a less-guilty pleasure in eating chocolate once I learned it is now considered good for you (antioxidants). Nor could I resist the temptation of buying a bottle of Vitamin Water. Several times I tried to feed my children DHA-added formula milk. I have found that navigating the market aisle that has smart foods with the anticipation of improving myself or my family could be fun and gratifying. In her discussion of scientific motherhood in the United States, Rima Apple (2006) similarly documents that many contemporary American women enthusiastically seek expert information to complement the decreasing amount of information obtained from family, sometimes forming a kind of “partnership” with experts. Scientific motherhood could also be strategically deployed by mothers to enhance social status and achieve upward social mobility, especially in minority communities (Litt 2000).

The ability to comply with scientific and expert advice, particularly when it is tightly linked with commercial opportunism, is highly class stratified.<sup>17</sup> The nutritionalized self is empowering and exciting only if one can afford promoted products, can seek more information if necessary, and can choose to withdraw from the nutritional mode. But my interviews with Indonesian women show a very different picture. Painful, is the word that I felt during my interviews with mothers. These women were fascinated by baby food products and the magic of

vitamins. But as I was sitting in a dark, small room in a dilapidated shack or in a dark corridor running through a slum and smelling the dirty river or sludge next door, I could not ignore the profound gap between the mothers in the ads and the women I was talking with. The reality in which they found themselves could not provide them with the pleasures of nutritionism, and they knew it too well. Furthermore, imposed as nutritionism is by powerful actors including experts, the state, and the industry, there is no voluntary exit from it for these women.

The nutritionalized self opens up a difficult moral terrain for many mothers. Like Rayna Rapp's (1999) "moral pioneer," who confronts the new challenges of reproductive science and prenatal technologies, mothers have to navigate complex fields of new lines of products, confusing expert advice, personal and intimate assessment of their and their family's needs, and pressure to be good "maternal citizens." The nutritionalized self is a disposition riddled with contradictions and ambivalence. The obligation of women to take care of their bodies in relation to nutritional science, citizenship obligations, and consumer choices puts them to the task of learning new languages and calculations. At the same time, they often find it impossible to follow the dicta of nutritionalized motherhood due to their poverty and social marginality. Nutritionism, for these impoverished women on the periphery of the global economy, represents the extension of capitalist, state, and scientific control, not the extension of autonomy.

By discussing the creation of the nutritional self and framing nutritionism as a part of biopower, I am stepping into a fiercely contested theoretical arena. Feminists have long criticized Foucault for projecting a total hegemony of biopower and not recognizing the space for agency, resistance, and social change.<sup>18</sup> The projection of a totalizing power over subjectivity is problematic for feminists, who are committed to the possibility of empowerment and social justice. Nonetheless, it is important to realize that Foucault himself recognized that biopower is a project, often incomplete, contested, and always in the making. Foucault argued that subjects of biopower are not completely passive and that biopower does not deprive them of the capacity to reflect on their situations and act differently (Sawicki 1991). Empirical examinations of biopower also demonstrate the complex picture of subjectivity of subjects under biopower. In her analysis of American motherhood, Apple (2006) found that mothers in the 1990s started to criticize the expert-driven child-rearing dogma, although they were simultaneously profoundly influenced by it. Feminist theories on medicalization similarly have provided examples that challenged the image of women as passive victims of hegemonic medical discourses, while still noting the tremendous influence of medical discourses (Grant 1998; Lock and Kaufert 1998). Biopower may be "experienced as enabling, or as providing a resource which can be used as a defense against other forms of power" (Lock and Kaufert 1998, 7). In her

analysis of scientific motherhood, Jacquelyn Litt (2000) argues that we need to understand mothers not as passive victims but as “agents that encounter and give meaning” (62) to scientized discourses. We have also seen subversive readings of modern nutritional claims by Indonesian women. To portray the disciplining power of nutritional science as omnipotent is to betray the awareness of the women I interviewed about their healthy suspicions about corporate marketing tactics and the incompleteness of the nutritional terminology. The women’s narratives show that they were not simply brainwashed but rather that they have pragmatically embraced, resisted, and modified the dominant nutritional discourse.<sup>19</sup> Like some other feminist scholars who have theorized biopower, my contention is not to describe a complete takeover by biopower but to recognize its specific function. I do so with the belief that it then can be the baseline for emancipatory action. The project of making a docile subject is never a finished one. Science- and medicine-based discourses come with possibilities of both consent and dissent.