

Erin Middlewood

Gestational Blues

A quest for healthy pregnancy in an unhealthy society

WHEN I LEARNED I was pregnant in March 2005, I did what any mother in history might have done: I marveled that the tiny blob of cells inside me could turn into a person. Then I started doing what mothers might have thought to do only recently: worry about all the hazardous substances that might keep those cells from properly multiplying and organizing themselves.

I frantically wracked my brain to remember when I last drank wine. How many glasses did I have? I stopped drinking alcohol, gave up my morning coffee, and began carefully avoiding soft cheeses, which can carry listeria. I choked down spinach, even though it didn't sit well in my queasy stomach during the early months, because I read that it would help my baby develop.

When in the past I had balked at higher prices for organic produce, I happily paid extra now. I anguished when our house was sprayed for carpenter ants and stayed away for the night. I wore a charcoal mask when I helped my husband paint the basement. I did all this because I realized that during pregnancy and for months beyond birth while breastfeeding, my body was not only connected to the environment—it *was* the environment. I was the Earth, at least to my child.

Just as I had worried about purity of water and air, now I had to worry about healthful blood and milk, precious natural resources of their own. I tried as much as I could to control what I ate, drank, inhaled, or absorbed.

It didn't take long for me to realize how absurd it all was, and for my sense of control to shatter.

A few months into my pregnancy, the Seattle-based Northwest Environment Watch released a study analyzing forty samples of breast milk from first-time breastfeeding mothers in my region. Despite the Pacific Northwest's conceit that it's a relatively pristine place to live, the study found the same toxic polybrominated diphenyl ethers, or PBDEs, and polychlorinated biphenyls, or PCBs, that had shown up in breast milk samples in other studies undertaken around the country.

I couldn't fool myself. There was no reason to believe that my breast milk would be any cleaner than that of any other mother who used a computer, couch, or bed treated with PBDE flame retardants. Nor did I have any reason to believe that my breast milk would escape contamination by PCBs, formerly used in transformers, fluorescent light ballasts, and other electrical equipment. Though banned in the United States in 1976, PCBs

persist for decades in the environment and climb the food chain into the meat, fish, and dairy products I grew up eating.

A Canadian study recently found the same chemicals and more in the body of renowned wildlife artist Robert Bateman, who lives on an idyllic British Columbia island and eats only organic food.

After the Seattle study, my husband and I asked our obstetrician whether we should reconsider my plans to breastfeed. Our doctor told us that breastfeeding remains the best nourishment for babies, and I pursued my own research for further comfort. Scientists first discovered DDE, a residue of DDT, and PCBs in human breast milk in the 1950s. Subsequent studies have continued to find the chemicals, as well as PBDEs, in breast milk. But a long string of studies persuasively documents the benefits of breastfeeding.

I found further reassurance from Dr. Ruth Lawrence, author of *Breastfeeding: A Guide for the Medical Profession* and a professor of obstetrics, gynecology, and pediatrics at the University of Rochester. "The benefits are tremendous," says Lawrence, who helped the American Academy of Pediatrics draft recent recommendations on breastfeeding that urge mothers to breastfeed for a year, exclusively so for six months. "Everything in human milk is just perfect for brain growth. Many of the constituents don't exist in cow's milk and formula."

Through breastfeeding, Lawrence and others say, I will give my son my immunities, as well as 160 fatty acids that are absent in baby formula, while sparing

him the difficult-to-digest cow's milk and soy found in formula—along with its higher levels of heavy metals, dangerous bacteria, and hormone-imbalancing phytoestrogens. According to a host of studies, breastfed babies have fewer allergies, grow up to have a lower incidence of obesity and cardiovascular disease, and enjoy invaluable bonding with their mothers. And women who breastfeed enjoy a rush of feel-good hormones as they offer life-sustaining nourishment to their children.

But my inquiry into breastfeeding ultimately revealed a worse affront to my son's health, one which I had much less control over: the many toxic chemicals, including the kind found in breast milk, that reach vulnerable fetuses through the umbilical cord before they're born.

The placenta filters a mother's blood before it passes nourishment to the fetus, but it can't stop a stream of industrial chemicals from slipping through. Among other hazards, fetuses are exposed to mercury from coal-fired power plants and seafood, polyaromatic hydrocarbons from vehicle exhaust and burning garbage, and perfluorinated chemicals found in Teflon, Scotchgard, food packaging, and fabric and carpet protectors.

In a 2005 study, the Washington DC-based Environmental Working Group found 287 chemicals in the umbilical cord blood of ten infants. "The dangers of pre- or post-natal exposure to this



complex mixture of carcinogens, developmental toxins and neurotoxins have never been studied," the report stated. "Chemical exposures in the womb or during infancy can be dramatically more harmful than exposures later in life."

Because of the complexity and cost of analyzing the cord blood—\$10,000 for each sample—the study was limited in scope. Nor could it yield data on the demographics or health of the mothers and babies, because the samples came anonymously from Red Cross centers across the country.

Still, the research established that the problem exists. And unlike exposure through breast milk, in utero chemical exposure evidently affects childhood development. In a sixteen-year study by the National Institute of Environmental Health Sciences, researchers measured prenatal and infant exposure to PCBs and DDE in 856 North Carolina children

through the early 1990s. The children exposed in utero experienced small delays in motor development, which they overcame after age two, said Dr. Walter J. Rogan, coauthor of the study. "[But] we found no relationship between postnatal exposure (via breast milk) and developmental delay."

As it turns out, several long-term studies suggest that the nutrients in breast milk may help counteract the ill effects of prenatal exposure to industrial chemicals. As noted by the Environmental Working

Group's 2003 report on toxins in breast milk, breastfed babies who had been exposed in utero to PCBs experienced less damage from the chemicals than their bottle-fed counterparts.

But even if breastfeeding and other choices can mitigate a child's exposure to toxins, the in utero exposure still occurs. It's nothing I can fix by myself. As overwhelmed as I have felt, my worries have been too narrow. The health of my child depends on more than whether I forgo dry-cleaned clothes, avoid artificial fragrances, eat organic spinach, or ventilate my computer room. As the person responsible for raising a healthy child, I need a few things from society too: mandated safety studies, bans on chemicals that aren't demonstrated to be safe, and a transformation of basic values. I need a world that no longer treats chemical-coated nonstick cookware as necessary, and the gift of life itself as expendable.