

# Unintended Consequences of Invoking the “Natural” in Breastfeeding Promotion

Jessica Martucci, PhD, Anne Barnhill, PhD

Medical and public health organizations recommend that mothers exclusively breastfeed for at least 6 months. This recommendation is based on evidence of health benefits for mothers and babies, as well as developmental benefits for babies. A spate of recent work challenges the extent of these benefits, and ethical criticism of breastfeeding promotion as stigmatizing is also growing.<sup>1</sup> Building on this critical work, we are concerned about breastfeeding promotion that praises breastfeeding as the “natural” way to feed infants. This messaging plays into a powerful perspective that “natural” approaches to health are better, a view examined in a recent report by the Nuffield Council on Bioethics.<sup>2</sup> Promoting breastfeeding as “natural” may be ethically problematic, and, even more troublingly, it may bolster this belief that “natural” approaches are presumptively healthier. This may ultimately challenge public health’s aims in other contexts, particularly childhood vaccination.

The measles outbreak of 2014–2015 sparked intense, condemnatory discussion of vaccine refusal. This public discussion often emphasized that some in the antivaccine camp believe that vaccines cause autism or contain harmful levels of toxins and impurities. Beneath the concern of many Americans over vaccine safety, a specific and not necessarily illogical worldview is discernable: a rejection of the manufactured, the synthetic and the “unnatural,” and an embrace of the “natural” as healthier and intrinsically better. Vaccines are often seen as “unnatural,” and boosting immunity “naturally” is viewed by some as the healthier and better approach. Online forums and blogs devoted to natural living offer countless examples of this perspective, and the recent book *Vaccine Nation* by Elena Conis documents the evolution of this worldview in detail.<sup>3</sup> Studies have shown that parents who resist vaccination tend to inhabit networks of like-minded individuals with similar beliefs.<sup>4</sup> These pockets of antivaccination sentiment tend to overlap with reliance on and interest in complementary and alternative medicine,<sup>5</sup> skepticism of institutional authority,<sup>6</sup> and a strong commitment and interest in health knowledge, autonomy, and healthy living practices.<sup>7</sup>

The idea of the “natural” evokes a sense of purity, goodness, and harmlessness. Meanwhile, synthetic substances, products, and technologies mass produced by industry (notably, vaccines) are seen

*Department of Medical Ethics and Health Policy, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania*

Drs Martucci and Barnhill conceptualized the piece, drafted and revised the manuscript, and approved the final manuscript as submitted.

**DOI:** 10.1542/peds.2015-4154

Accepted for publication Jan 6, 2016

Address correspondence to Anne Barnhill, PhD, Department of Medical Ethics and Health Policy, Blockley Hall 14th Floor, 423 Guardian Dr, Philadelphia, PA 19104-4865. E-mail: anne.barnhill@gmail.com

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2016 by the American Academy of Pediatrics

**FINANCIAL DISCLOSURE:** The authors have indicated they have no financial relationships relevant to this article to disclose.

**FUNDING:** No external funding.

**POTENTIAL CONFLICT OF INTEREST:** The authors have indicated they have no potential conflicts of interest to disclose.

**To cite:** Martucci J and Barnhill A. Unintended Consequences of Invoking the “Natural” in Breastfeeding Promotion. *Pediatrics*. 2016;137(4):e20154154

as “unnatural” and often arouse suspicion and distrust. Part of this value system is the perception that what’s natural is safer, healthier and less risky. This embrace of the “natural” over the “unnatural” appears in a variety of contemporary scientific and medical issues beyond vaccination, including rejection of genetically modified foods, a preference for organic over conventionally grown foods, and rejection of assisted reproductive technologies,<sup>2</sup> as well as concerns over environmental toxins and water fluoridation. Much of the interest in complementary and alternative medicines also hinges on “ideas of natural techniques as safer, gentler and benign.”<sup>2</sup> In some cases, however, this view that “natural” is synonymous with “better” may work against specific public health goals.

The recent Nuffield Council report documents these overlapping ideas in detail and suggests that although some individuals may understand “natural/unnatural” as value neutral, there are other perspectives, for example, the fear that scientific innovations may be wrong because they move living things away from their fundamental nature and that nature offers the best way of doing things.<sup>2</sup> This latter view is clearly and commonly invoked in breastfeeding promotion. For example, the US Department of Health and Human Services’ “It’s only natural” breastfeeding promotion campaign is an explicit attempt to persuade women to breastfeed by framing breastfeeding as better than formula because it is natural. Furthermore, the American Academy of Pediatrics has referred to breast milk as “the best and most natural food for infants.”<sup>8</sup> A breastfeeding promotion poster produced by the New York City Department of Health and Mental Hygiene describes breastfeeding as “Mom-made” as compared with formula feeding, labeled with a red circle that reads “Factory-made.”

The intended message to parents presumably is that, in this one particular case, factory-made, unnatural substances are unhealthy and should be avoided, whereas the “Mom-made” and natural option is safer and better. Breastfeeding has also been referred to as “natural” by the World Health Organization, the California Department of Public Health, and the Vermont Department of Health, to give just a few examples, and numerous other instances of this approach have been documented in a report put out by the Berkeley Media Studies Group in 2010.<sup>9</sup>

It makes sense that breastfeeding promotion would make appeals to the “natural.” The resurgence in breastfeeding rates over roughly the past 4 decades is rooted in a history of women’s organized efforts during the 1950s and 1960s to redeem the value of feeding babies “naturally” in the face of widespread medical support for formula feeding.<sup>10</sup> Coupling nature with motherhood, however, can inadvertently support biologically deterministic arguments about the roles of men and women in the family (for example, that women should be the primary caretakers of children). Referencing the “natural” in breastfeeding promotion, then, may inadvertently endorse a controversial set of values about family life and gender roles, which would be ethically inappropriate. Invoking the “natural” is also imprecise because it lacks a clear definition. For similar reasons, the recent Nuffield report states that public agencies, governments and organizations contributing to public and political debates about science, technology, and medicine “should avoid using the terms natural, unnatural and nature” unless they make transparent the “values or beliefs that underlie them.”<sup>2</sup>

Whatever the ethics of appealing to the natural in breastfeeding promotion, it raises practical concerns. The “natural” option

does not align consistently with public health goals. If doing what is “natural” is “best” in the case of breastfeeding, how can we expect mothers to ignore that powerful and deeply persuasive worldview when making choices about vaccination? If breastfeeding promotion frames the “factory-made” option as risky or unhealthy, what should parents conclude when choosing between factory-made vaccines and boosting immunity “naturally”? We should think twice before referencing the “natural” in breastfeeding promotion, even if it motivates women to breastfeed.

## REFERENCES

1. Smithers LG, Kramer MS, Lynch JW. Effects of breastfeeding on obesity and intelligence: causal insights from different study designs. *JAMA Pediatr.* 2015;169(8):707–708
2. Nuffield Center on Bioethics. Ideas about naturalness in public and political debates about science, technology and medicine. November 2015. Available at: [http://nuffieldbioethics.org/wp-content/uploads/NCOB\\_naturalness-analysis-paper.pdf](http://nuffieldbioethics.org/wp-content/uploads/NCOB_naturalness-analysis-paper.pdf). Accessed December 3, 2015
3. Conis E. Tampering with nature. In: *Vaccine Nation: America's Changing Relationship With Immunization*. Chicago, IL: University of Chicago Press; 2015:131–158
4. Brunson EK. The impact of social networks on parents' vaccination decisions. *Pediatrics.* 2013;131(5). Available at: [www.pediatrics.org/cgi/content/full/131/5/e1397](http://www.pediatrics.org/cgi/content/full/131/5/e1397)
5. Dubé E, Vivion M, Sauvageau C, Gagneur A, Gagnon R, Guay M. “Nature does things well, why should we interfere?”: Vaccine hesitancy among mothers. *Qual Health Res.* 2015;26(3):411–425
6. Kata A. Anti-vaccine activists, Web 2.0, and the postmodern paradigm—an overview of tactics and tropes used online by the anti-vaccination movement. *Vaccine.* 2012;30(25):3778–3789

7. Salmon DA, Moulton LH, Omer SB, DeHart MP, Stokley S, Halsey NA. Factors associated with refusal of childhood vaccines among parents of school-aged children: a case-control study. *Arch Pediatr Adolesc Med.* 2005;159(5):470–476
8. Burton OM. AAP Applauds IRS Ruling on Breast Pumps, 2011. Available at: [www.aap.org/en-us/about-the-aap/aap-press-room/pages/AAP-Apprals-IRS-Ruling-on-Breast-Pumps](http://www.aap.org/en-us/about-the-aap/aap-press-room/pages/AAP-Apprals-IRS-Ruling-on-Breast-Pumps). Accessed December 3, 2015
9. Berkeley Media Studies Group. Talking about breastfeeding: why the health argument isn't enough. May 1, 2010. Available at: <http://www.bmsg.org/resources/publications/issue-18-talking-about-breastfeeding-why-the-health-argument-isnt-enough>. Accessed December 3, 2015
10. Martucci J. Why breastfeeding?: Natural motherhood in post-war America. *J Womens Hist.* 2015;27(2):110–133

## Unintended Consequences of Invoking the "Natural" in Breastfeeding Promotion

Jessica Martucci and Anne Barnhill

*Pediatrics*; originally published online March 4, 2016;

DOI: 10.1542/peds.2015-4154

<b>Updated Information &amp; Services</b>	including high resolution figures, can be found at: <a href="/content/early/2016/03/02/peds.2015-4154.full.html">/content/early/2016/03/02/peds.2015-4154.full.html</a>
<b>References</b>	This article cites 6 articles, 1 of which can be accessed free at: <a href="/content/early/2016/03/02/peds.2015-4154.full.html#ref-list-1">/content/early/2016/03/02/peds.2015-4154.full.html#ref-list-1</a>
<b>Subspecialty Collections</b>	This article, along with others on similar topics, appears in the following collection(s): <b>Ethics/Bioethics</b> <a href="/cgi/collection/ethics:bioethics_sub">/cgi/collection/ethics:bioethics_sub</a> <b>Nutrition</b> <a href="/cgi/collection/nutrition_sub">/cgi/collection/nutrition_sub</a> <b>Breastfeeding</b> <a href="/cgi/collection/breastfeeding_sub">/cgi/collection/breastfeeding_sub</a>
<b>Permissions &amp; Licensing</b>	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: <a href="/site/misc/Permissions.xhtml">/site/misc/Permissions.xhtml</a>
<b>Reprints</b>	Information about ordering reprints can be found online: <a href="/site/misc/reprints.xhtml">/site/misc/reprints.xhtml</a>

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2016 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



# PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

## **Unintended Consequences of Invoking the "Natural" in Breastfeeding Promotion**

Jessica Martucci and Anne Barnhill

*Pediatrics*; originally published online March 4, 2016;

DOI: 10.1542/peds.2015-4154

The online version of this article, along with updated information and services, is located on the World Wide Web at:

</content/early/2016/03/02/peds.2015-4154.full.html>

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2016 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

