

Cooperative Extension Answers the Call to Action to Support Breastfeeding

Rutgers University has made this article freely available. Please share how this access benefits you.
Your story matters. [\[https://rucore.libraries.rutgers.edu/rutgers-lib/48352/story/\]](https://rucore.libraries.rutgers.edu/rutgers-lib/48352/story/)

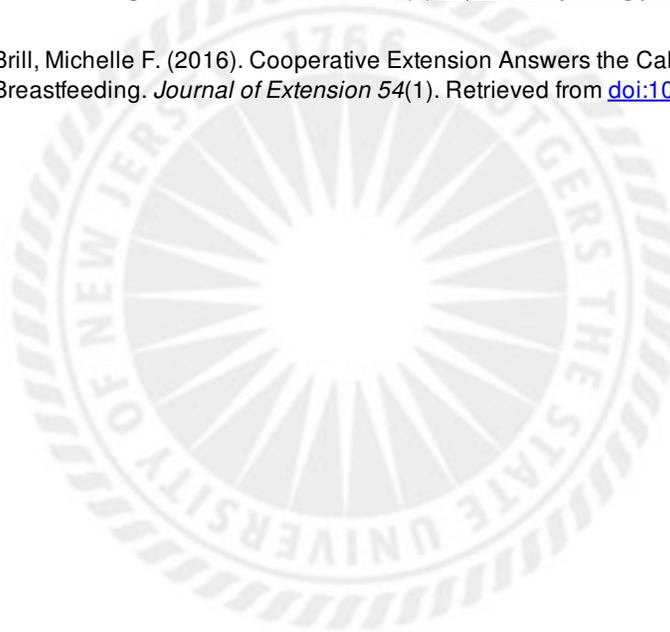
This work is an **ACCEPTED MANUSCRIPT (AM)**

This is the author's manuscript for a work that has been accepted for publication. Changes resulting from the publishing process, such as copyediting, final layout, and pagination, may not be reflected in this document. The publisher takes permanent responsibility for the work. Content and layout follow publisher's submission requirements.

Citation for this version and the definitive version are shown below.

Citation to Publisher Brill, Michelle F. (2016). Cooperative Extension Answers the Call to Action to Support Breastfeeding. *Journal of Extension* 54(1). <http://www.joe.org/joe/2016february/iw2.php>.

Citation to *this* Version: Brill, Michelle F. (2016). Cooperative Extension Answers the Call to Action to Support Breastfeeding. *Journal of Extension* 54(1). Retrieved from [doi:10.7282/T3W66NQS](https://doi.org/10.7282/T3W66NQS).



Terms of Use: Copyright for scholarly resources published in RUcore is retained by the copyright holder. By virtue of its appearance in this open access medium, you are free to use this resource, with proper attribution, in educational and other non-commercial settings. Other uses, such as reproduction or republication, may require the permission of the copyright holder.

Article begins on next page

Cooperative Extension Answers the Call to Action to Support Breastfeeding

Michelle F. Brill
Family and Community Health Sciences Educator
Rutgers, The State University of New Jersey
Rutgers Cooperative Extension of Mercer County
Trenton, New Jersey
brill@aesop.rutgers.edu

Introduction

Childhood obesity, nutrition education, parenting education, health care cost reduction ... what one topic covers all of these Extension focus areas? Breastfeeding! Extension educators have many opportunities to promote breastfeeding. From direct education and publications to engaging with statewide initiatives, Extension is an important public health partner.

To a moderate extent, breastfeeding reduces the risk of overweight during childhood (Dewey, 2003). Overweight during childhood is associated with chronic disease (Kim & Peterson, 2008). If 90% of US families complied with medical recommendations to exclusively breastfeed for six months, \$13 billion in health care costs would be saved annually (Bartick & Reinhold, 2010). The Surgeon General's Call to Action to Support Breastfeeding (U.S. Department of Health and Human Services, 2011), Healthy People 2020 (U.S. Dept. of Health and Human Services, 2014), and the Centers for Disease Control's Division of Nutrition, Physical Activity and Obesity's (Rieker, 2011) call to states to coordinate efforts to prevent obesity should mobilize Extension educators to take action.

Background

Medical and dietetic literature champions breastfeeding and advocates for promotion of breastfeeding in the community (Livingston, 2004). However, a review of popular Extension literature found that breastfeeding education is generally a small component of parenting programs. There were eight articles in JOE, three in the Forum for Family and Consumer Issues, and three in eXtension (see References). Some Extension Services address breastfeeding in fact sheets or parent newsletters (Bobroff, 2011; Hughes, Brill, & Hearne-Barsamian, 2011; Napieralsi & Devine, 1999; Nitzke, Tanumihardjo, Rettammel, Coleman, & Harvey, 2006; Sigman-Grant, 2013), and one offers a six-class series taught by a Nutrition Program Educator who is a Certified Lactation Counselor (Cornell Cooperative Extension, 2015). This manuscript describes a novel approach for Cooperative Extension to engage with unique partners to promote breastfeeding through education, policy and environmental change.

The Federal Government's Role: The Surgeon General, Healthy People 2020, and the CDC

Despite the many advantages of breastfeeding, many women choose to bottle-feed their babies for personal reasons, or because of social and structural barriers, such as attitudes and policies regarding breastfeeding in health care and worksite settings (Kahn, L.K., Sobush, K., Keener, D.,

Goodman, K., Lowry, A., Kakietek, J., et al., 2009). In 2011, Surgeon General Benjamin called breastfeeding one of the most highly effective preventive measures a mother can take to protect the health of her infant and herself. She identified active involvement and support from communities, health care systems, and employers as key actions to improve breastfeeding rates. Healthy People 2020 set breastfeeding objectives (Table 1), and the CDC’s Nutrition, Physical Activity and Obesity (NPAO) programs work toward leveraging resources and coordinating statewide efforts that focus on policy, environmental, and behavioral approaches to prevent obesity and other chronic diseases. Working with multiple partners who bring the perspectives of their constituencies, state programs are expected to develop, implement, and evaluate interventions that address six obesity prevention behaviors, one of which is increasing breastfeeding initiation, duration, and exclusivity (Table 2) (CDC, 2011).

Table 1
Healthy People 2020 Breastfeeding Objectives

Breastfeeding Objective	Target
Infants ever breastfed	81.9%
Breastfed at six months	60.6%
Breastfed at one year of life	34.1%
Worksites with lactation support programs	38%
Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies	Increase by 8.1%

Table 2
CDC Targeted Obesity Prevention Behaviors

Increase:	Decrease:
<i>Breastfeeding initiation, duration and exclusivity</i>	Consumption of sugar-sweetened beverages
Physical activity	Consumption of energy-dense foods
Fruit and vegetable consumption	TV and screen time

Extension’s Contributions to Breastfeeding Promotion in New Jersey

Collaboration with other organizations to reach a common goal is a hallmark of Cooperative Extension (Jouridine & Green, 2001). Since 2009, Rutgers Cooperative Extension (RCE) has been an active partner in New Jersey’s NPAO program “Shaping NJ”, a public-private partnership of over 200 members coordinated by the NJ Department of Health, working to prevent obesity through environmental and policy change. RCE’s Family and Community Health Sciences

(FCHS) Department faculty served on workgroups which identified proven strategies that promote breastfeeding in the health care, childcare, and worksite settings (Table 3).

Table 3

ShapingNJ Obesity Prevention Strategies Related to Breastfeeding (NJ Dept. of Health, 2013)

Health Care	Childcare	Workplace
<p>Promote exclusive breastfeeding through proven policies and practices.</p> <ul style="list-style-type: none"> • Encourage delivery sites to adopt the WHO/UNICEF’s “Ten Steps to Successful Breastfeeding” and the Joint Commission’s Perinatal Care Core Measure Set, which requires participating hospitals to report their rates of exclusive breastfeeding. • Provide support in primary care and community settings, before and after women give birth, to encourage exclusive breastfeeding. 	<p>Require childcare centers and after-school programs to offer healthy food and beverages, provide opportunities for physical activity, limit television viewing and support breastfeeding for children in their care.</p> <ul style="list-style-type: none"> • Revise childcare center licensing requirements for childcare and after-school programs to ensure they offer healthy foods, encourage physical activity, limit television viewing, and support breastfeeding. • Provide training for childcare providers in healthy child nutrition and physical activity and ways to limit television and support breastfeeding. 	<p>Encourage New Jersey businesses to accommodate breastfeeding women. The Business Case for Breastfeeding, a resource that educates employers about the benefits of worksite programs, including providing a space for women to express milk, should be distributed widely.</p> <ul style="list-style-type: none"> • Disseminate model worksite wellness policies and programs to the business community.

Health Care: Educating the Providers

To promote breastfeeding in primary care settings, Extension faculty co-authored an original curriculum titled BEST for New Jersey: Breastfeeding Education Support and Training (NJ Department of Health, American Academy of Pediatrics, New Jersey Breastfeeding Coalition, 2014), and engaged new partners including midwives and doulas. Twelve practices (129 participants) received face-to-face training. The curriculum remains available in ShapingNJ’s online Healthcare Resource Toolkit (NJ Department of Health, 2012).

Best practices in the hospital setting are articulated in the World Health Organization/UNICEF’s Ten Steps to Successful Breastfeeding (Baby-Friendly USA, 2012). Extension faculty serve on the New Jersey Hospital Association’s technical advisory panel which assists maternity hospitals through the Baby-Friendly designation process. Funding, project design, evaluation, and

sustainability support is made available. To date, four hospitals are certified and 22 are on the path to designation.

Childcare

Breastfeeding rates drop significantly when mothers return to work (Laughlin, 2011). Support for breastfeeding mothers who place their infants in childcare is critical. In 2010 New Jersey childcare licensing regulations contained no references to breastfeeding. Extension educators participated in ShapingNJ focus groups which recommended licensing revisions to address obesity prevention and breastfeeding. In 2013 new regulations were adopted which require centers to follow a feeding plan developed mutually with each child's parent(s) regarding breastfeeding arrangements and accommodations (New Jersey Register, 2013).

Extension authored two original fact sheets for ShapingNJ’s online Childcare Best Practices Toolkit for providers on safe handling of breast milk, and breastfeeding policy recommendations that childcare facilities describe their nutrition and infant feeding practices, staff training, and breastfeeding support efforts such as providing private space for nursing, and making breastfeeding literature and resources available (*Breastfeeding* available at: <http://www.state.nj.us/health/fhs/shapingnj/documents/work/publications/Child%20Care%20Center%20Tool%20Kit/7.%20Breastfeeding/b.%20Proper%20Handling%20and%20Storage%20of%20Breastmilk.pdf> and *Breastfeeding Policy Guidance* available at: <http://www.state.nj.us/health/fhs/shapingnj/documents/work/publications/Child%20Care%20Center%20Tool%20Kit/7.%20Breastfeeding/c.%20Breastfeeding%20Policy%20Guidance.pdf> NJ Department of Health, 2012).

Extension faculty also developed and presented a workshop “Make Your Childcare Center Breastfeeding-Friendly” at the New Jersey Childcare Association annual conference for childcare administrators, teachers, and assistants.

Worksite

Mothers who breastfeed after returning to work face numerous obstacles some of which have been eliminated by the Patient Protection and Affordable Care Act (PPACA) which requires worksites with 50+ employees to provide reasonable break time, and a place, other than a bathroom, for an employee to express breast milk for one year after the child’s birth (U.S. Department of Health and Human Services, 2009). Employers benefit from accommodating breastfeeding employees (Table 4). Extension faculty on the worksite workgroup identified evidence-based resources to encourage employers to become breastfeeding-friendly. ShapingNJ’s online Worksite Resources toolkit (NJ Department of Health, 2012) was the sole product of this workgroup at the time, as meetings were suspended due to loss of group leadership.

Table 4
U.S. Breastfeeding Committee Outline of Benefits to Employers (USBC, 2015)

Employer	Less absenteeism because breastfed	Lower health	Lower employee	Higher productivity	Positive public
-----------------	------------------------------------	--------------	----------------	---------------------	-----------------

Benefits	infants are healthier	care costs	turnover which reduces cost of hiring and training new employees	and loyalty	image
-----------------	-----------------------	------------	--	-------------	-------

State breastfeeding coalitions present another opportunity for Extension partnership. Extension faculty on the New Jersey Breastfeeding Coalition co-developed criteria for a breastfeeding-friendly workplace recognition award. Criteria include having a welcoming atmosphere, a breastfeeding support policy allowing breastfeeding mothers to nurse/pump as protected by law, and flexible return-to-work options. The award is currently open for nominations.

Conclusion and Implications

Extension’s expertise in nutrition, health, evidence-based obesity prevention strategies, parent education, and worksite wellness can be instrumental in moving the nation forward towards meeting its breastfeeding objectives. In New Jersey, Extension’s collaboration on statewide initiatives that educate health care providers, and guide hospitals through the Baby-Friendly designation process, produced measurable results. Extension’s collaboration, direct education, and published resources for childcare providers led to regulatory and practice changes. Extension identified resources to disseminate to worksites on the benefits of supporting breastfeeding employees. As a result of state initiatives, New Jersey’s breastfeeding rates have increased in all categories: ever breastfed; exclusive breastfeeding at three and six months; and breastfeeding at six and twelve months (CDC, 2014).

Extension’s access to county and state leadership and the media can be leveraged to promote public health awareness campaigns and events such as National Breastfeeding Awareness Month every August. Extension’s unique status within the land-grant university system positions it to be a strong contender for grants for which smaller organizations may not qualify.

In addition to our role as collaborators, we remain direct educators. As technology plays an increasing role in how people obtain information, Extension’s websites and social media are reliable resources for consumers, businesses, childcare, and healthcare providers. Our current programming has the potential to promote breastfeeding. For example, 4-H babysitter training could incorporate instruction on safe breast milk handling and feeding. This would have the added value of normalizing breastfeeding for future generations of parents. Extension educators have a role to play in educating businesses, consumers, and providers about the provisions of the PPACA.

As we continue to educate, we must also recognize that information sharing alone is not likely to result in environmental and/or policy change. Strong collaboration with those who have the necessary power and expertise to bring about recommended environmental changes is indicated (Lu, Dickin & Dollahite, 2014). State health departments and health care providers; childcare

licensing agencies and providers; breastfeeding coalitions; and the business community are key collaborators.

References

Baby-Friendly USA. (2012). Retrieved from <http://www.babyfriendlyusa.org/about-us/baby-friendly-hospital-initiative/the-ten-steps>

Bartick, M., & Reinhold, A. (2010). The burden of suboptimal breastfeeding in the United States: A pediatric cost analysis. *Pediatrics*, 125(5), e1048-e1056. Retrieved from <http://pediatrics.aappublications.org.proxy.libraries.rutgers.edu/content/125/5/e1048.full.pdf+html>

Betterley, C. & Dobson, B. (2000). Tools for evaluating written and audiovisual nutrition education materials. *Journal of Extension* [On-line], 38(4) Article 4TOT3. Available at: <http://www.joe.org/joe/2000august/tt3.php>

Bobroff, L. (2011). Feeding your baby. *University of Florida IFAS Extension*. Retrieved from <http://edis.ifas.ufl.edu/pdf/HE/HE96400.pdf>

Centers for Disease Control and Prevention Division of Nutrition, Physical Activity, and Obesity (2011). Developing and using an evaluation consultation group. Retrieved from <http://www.cdc.gov/obesity/downloads/EvaluationConsultationGroup.pdf>

Centers for Disease Control and Prevention (2014). Breastfeeding report card. Retrieved from <http://www.cdc.gov/breastfeeding/pdf/2014breastfeedingreportcard.pdf>

Contreras, D.A. (2005). The influence of a paraprofessional, home-visitation program on partnering behaviors. *The Forum for Family and Consumer Issues*, 10(2). Retrieved from <http://www.ncsu.edu/ffci/publications/2005/v10-n2-2005-october/ar-1-influence.php>

Cornell Cooperative Extension of Tompkins County. (2015). Breastfeeding for the health of it. Retrieved from <http://ccetompkins.org/events/2015/01/01/breastfeeding-for-the-health-of-it>

Dewey, K.G. (2003). Is breastfeeding protective against child obesity? *Journal of Human Lactation*, 19(1), 9-18.

eXtension. (2010). Breastfeeding and infant nutrition in child care. Retrieved from <http://www.extension.org/pages/25774/breastfeeding-and-infant-nutrition-in-child-care#.VNOFNhwo6po>

eXtension. (2012). Guidelines for child care providers to prepare and feed bottles to infants. Retrieved from <http://www.extension.org/pages/25404/guidelines-for-child-care-providers-to-prepare-and-feed-bottles-to-infants#.VNOE0Rwo6po>

eXtension. (2013). Supporting breastfeeding mothers and infants in child care. Retrieved from <http://www.extension.org/pages/25776/supporting-breastfeeding-mothers-and-infants-in-child-care>

Futris, T.G. & Stone, H.M. (2011). Now they know: Helping new mothers gain parenting knowledge and become aware of family and consumer sciences extension programming. *Journal of Extension* [On-line], 49(1) Article 1FEA9. Available at: <http://www.joe.org/joe/2011february/a9.php>

Futris, T.G. & Stone, H.M. (2010). The reaching new parents project: The impact of a FCS Extension resource guide on new mothers. *The Forum for Family and Consumer Issues*, 15(3). Retrieved from <http://ncsu.edu/ffci/publications/2010/v15-n3-2010-winter/futris-stone.php>

Harriman, L.C. (1980). A newsletter for parents. *Journal of Extension* [On-line]. Available at: <http://www.joe.org/joe/1980january/80-1-a3.pdf>

Hockersmith, L.D. (2013). Sextension? *Journal of Extension* [On-line], 51(1) Article 1COM1. Available at: <http://www.joe.org/joe/2013february/comm1.php>

Horodyski, M.A & Mills, K.J. (2013). The voice of low-income adolescent mothers on infant feeding. *Journal of Extension* [On-line], 52(6) Article 6RIB5. Available at: <http://www.joe.org/joe/2014december/rb5.php>

Hughes, L.J., Brill, M.F. & Hearne-Barsamian, J. (2011). Handle with care: Guidelines for safe storage and use of mother's milk. *Rutgers NJAES Cooperative Extension*. Retrieved from <http://njaes.rutgers.edu/pubs/publication.asp?pid=fs949>

Kahn, L.K., Sobush, K., Keener, D., Goodman, K., Lowry, A., Kakietek, J., & Zaro, S. (2009). Recommended community strategies and measurements to prevent obesity in the United States. CDC. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm>

Kim, J. & Peterson, K.E. (2008). Association of infant child care with infant feeding practices and weight gain among US infants. *Archives of Pediatric and Adolescent Medicine*, 162(7), 627-633.

Jang, J. & Dworkin, J. (2012). Babycenter.com: New parent behavior in an online community. Retrieved from <http://www.ncsu.edu/ffci/publications/2012/v17-n2-2012-summer-fall/jang-dworkin.php>

Jouridine, L.A., & Green, S.D. (2001). Extending our reach: Strategic opportunities for Cooperative Extension to promote infant health through sudden infant death syndrome prevention education. *Journal of Extension* [On-line], 39(3) Article 3FEA8. Available at: <http://www.joe.org/joe/2001june/a8.php>

Laughlin, L. (2011). Maternity Leave and Employment Patterns: 2006–2008. Current Population Report, P70-128. U.S. Census Bureau, Washington, DC. Retrieved from <http://www.census.gov/prod/2011pubs/p70-128.pdf>

Livingston, S. (2004). Children and weight: Taking action in Solano County. Children and Weight Coalition of Solano County. Retrieved from <http://cesolano.ucdavis.edu/files/59754.pdf>

Lu, A.H., Dickin, K., & Dollahite, J. (2014). Development and application of a framework to assess community nutritionists' use of environmental strategies to prevent obesity. *Journal of Nutrition Education and Behavior*, 46(6), 475-483.

Napieralsi, J.A., & Devine, C. (1999). Breast-feeding and the risk of breast cancer. *Cornell Cooperative Extension*. Retrieved from https://dspace.library.cornell.edu/bitstream/1813/14559/1/fs29.breast_feed.pdf

New Jersey Department of Health. (2013). New Jersey State Obesity Prevention Plan. Retrieved from <http://www.state.nj.us/health/fhs/shapingnj/library/ShapingNJ%20Obesity%20Prevention%20Plan-Final.pdf>

New Jersey Department of Health, American Academy of Pediatrics, New Jersey Breastfeeding Coalition. (2014). Educating Practices In Their Communities (EPIC) BEST for New Jersey: Breastfeeding Education Support, & Training. Retrieved from <http://aapnj.org/uploadfiles/documents/PCORE/BFHI/031314%20EPIC%20BEST%20Webinar%20Presentation.pdf>

New Jersey Department of Health ShapingNJ. (2012). HealthCare Workgroup Resource Toolkit. Retrieved from <http://nj.gov/health/fhs/shapingnj/documents/work/publications/Healthcare%20Toolkit%20-%20June%201,%202012.pdf>

New Jersey Department of Health ShapingNJ. (2012). Child Care Best Practices Toolkit. Retrieved from <http://www.state.nj.us/health/fhs/shapingnj/shapingnj/childcare/childcaretoolkit.html>

New Jersey Department of Health ShapingNJ. (2012). Worksite Resources. Retrieved from <http://www.state.nj.us/health/fhs/shapingnj/documents/work/publications/Worksite%20Resources.pdf>

New Jersey Register. Manual of Requirements for Child Care Centers. (2013). Retrieved from http://www.njcite.org/wp-content/uploads/2013/03/CCC-Licensing-regs-adoption-notice-45_NJR_633A-3-18-13-PDF1.pdf

Newman, D. & Yang, P.N. (2007). Engagement in English language learner (ELL) Latino, Hmong, and Somali communities. *Journal of Extension* [On-line], 45(5) Article 5IAW1. Available at: <http://www.joe.org/joe/2007october/iw1.php>

Nitzke, S., Tanumihardjo, S., Rettammel, A., Coleman, G. & Harvey, H. (2005). Nutrition for family living: WIC changes formula provision in January 2006. *UW Extension*. Retrieved from <http://www.uwex.edu/ces/WNEP/specialist/nfl/mmpdfs/0511.pdf>

Rieker, P. (2011). Centers for Disease Control and Prevention. Evaluation Technical Assistance Document: Division of Nutrition, Physical Activity, and Obesity (DNPAO) Partnership Evaluation Guidebook and Resources. Retrieved from <http://www.cdc.gov/obesity/downloads/partnershipevaluation.pdf>

Sigman-Grant, M. (2013). For the health professional: Birthing practices affect breastfeeding outcomes. *University of Nevada Cooperative Extension*. Retrieved from <http://nsla.nevadaculture.org/statepubs/epubs/31428003057599.pdf>

United States Breastfeeding Committee. (2015). Federal workplace law. Retrieved from <http://www.usbreastfeeding.org/p/cm/ld/fid=234>

U.S. Department of Health and Human Services. (2011). Executive Summary: The Surgeon General's Call to Action to Support Breastfeeding. Retrieved from <http://www.surgeongeneral.gov/library/calls/breastfeeding/executivesummary.pdf>

U.S. Department of Health and Human Services. (2014). Healthy People 2020. Retrieved from <http://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives>

U.S. Department of Health and Human Services. (2009). Patient Protection and Affordable Care Act. Retrieved from <http://www.hhs.gov/healthcare/rights/law/patient-protection.pdf>

Van Offelen, S., Sherman, S., May, J., & Rhodes, F. (2011). Designing nutrition education programs for Somali audiences: The role of cultural and religious practices. *Journal of Extension* [On-line], 49(3) Article 3FEA5. Available at: <http://www.joe.org/joe/2011june/a5.php>

Abstract

Extension has many opportunities to promote breastfeeding, one of the most highly effective preventive measures a mother can take to protect the health of her infant, and herself. This manuscript describes how and why Cooperative Extension can partner with federal and state efforts to promote breastfeeding. Rutgers Family and Community Health Sciences department members served on state workgroups to identify and implement evidence-based strategies to promote breastfeeding in the health care, childcare, and worksite settings. Extension is an important public health partner, providing technical assistance, content expertise, and resources that meet the needs of its community.

Keywords: breastfeeding, Baby-Friendly, obesity prevention, childcare, worksite wellness