

Cooperative Extension Answers the Call to Action to Support Breastfeeding

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 article describes how and why Cooperative Extension can and should partner with federal and state efforts to promote breastfeeding. Members of Rutgers' Family and Community Health Sciences department served on state work groups to identify and implement evidence-based strategies for promoting breastfeeding in health care, child care, and work site settings. Extension is an important public health partner, providing technical assistance, content expertise, and resources that meet the needs of communities.

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

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Introduction

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

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 U.S. families complied with medical recommendations to exclusively breastfeed for 6 months, \$13 billion in health care costs would be saved annually (Bartick & Reinhold, 2010). An appeal by the Surgeon General's Call to Action to Support Breastfeeding (U.S. Department of Health and Human Services, 2011), Healthy People 2020 (U.S. Department of Health and Human Services, 2014), and the Centers for Disease Control and Prevention (CDC) Nutrition, Physical Activity, and Obesity

(NPAO) division (Rieker, 2011) for 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 the *Journal of Extension*, three in the *Forum for Family and Consumer Issues*, and three on eXtension.org. 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, 2005; 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 of Tompkins County, 2015). This article describes a novel approach by which Cooperative Extension can 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 work site settings (Kahn 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 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 bringing 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) (Centers for Disease Control and Prevention [CDC], 2011).

Table 1.
Healthy People 2020 Breastfeeding Objectives

Breastfeeding Objective	Target
Infants ever breastfed	81.9%
Breastfed at 6 months	60.6%
Breastfed at 1 year of life	34.1%
Work sites with lactation support programs	38%
Increase in the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies	Increasing of

8.1%

Table 2.
CDC-Targeted Obesity Prevention Behaviors

Increase:	Decrease:
Breastfeeding initiation, duration, and exclusivity	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 New Jersey Department of Health, working to prevent obesity through environmental and policy change. RCE's Department of Family and Community Health Sciences (FCHS) faculty served on work groups that identified proven strategies that promote breastfeeding in health care, child care, and work site settings (Table 3) (New Jersey Department of Health, 2013).

Table 3.
ShapingNJ Obesity Prevention Strategies Related to Breastfeeding

Health Care	Child Care	Workplace
Promote exclusive breastfeeding through proven policies and practices. <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 	Require child care centers and after-school programs to offer healthful food and beverages, provide opportunities for physical activity, limit television viewing, and support breastfeeding for children in their care. <ul style="list-style-type: none"> • Revise child care center licensing requirements for 	Encourage New Jersey businesses to accommodate breastfeeding women. The Business Case for Breastfeeding, a resource that educates employers about the benefits of work site programs, including providing a space for women to express milk, should be distributed widely. <ul style="list-style-type: none"> • Disseminate model work site wellness policies and programs to the business

their rates of exclusive breastfeeding. <ul style="list-style-type: none">• Provide support in primary care and community settings, before and after women give birth, to encourage exclusive breastfeeding.	child care and after-school programs to ensure that they offer healthful foods, encourage physical activity, limit television viewing, and support breastfeeding. <ul style="list-style-type: none">• Provide training for child care providers in healthful child nutrition and physical activity and ways to limit television and support breastfeeding.	community.
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Health Care: Educating the Providers

To promote breastfeeding in primary care settings, Extension faculty coauthored an original curriculum titled BEST for New Jersey: Breastfeeding Education Support and Training (New Jersey 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 Health Care Workgroup Resource Toolkit (New Jersey Department of Health ShapingNJ, 2012b).

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.

Child Care

Breastfeeding rates drop significantly when mothers return to work (Laughlin, 2011). Support for breastfeeding mothers who place their infants in child care is critical. In 2010, New Jersey child care 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 that 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 Child Care Best Practices Toolkit for providers (New Jersey Department of Health ShapingNJ, 2012a). One explains safe handling of breast milk, and the other addresses breastfeeding policy recommendations related to child care facilities' nutrition and infant feeding practices, staff training, breastfeeding support efforts (such as providing private space for nursing), display of breastfeeding literature, and referrals to pertinent resources (Appendices A and B).

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

Work Site

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). The PPACA requires work sites with 50 or more employees to provide reasonable break time and a place other than a bathroom for an employee to express breast milk for 1 year after the child's birth (U.S. Department of Health and Human Services, 2009). Employers benefit from accommodating breastfeeding employees (Table 4) (United States Breastfeeding Committee, 2015). Extension faculty on the work site work group identified evidence-based resources to encourage employers to become breastfeeding-friendly. ShapingNJ's online Worksite Resources tool kit (New Jersey Department of Health Shaping NJ, 2012c) was the sole product of this work group at the time, as meetings were suspended due to loss of group leadership.

Table 4.
U.S. Breastfeeding Committee Outline of Benefits to Employers

Employer Benefits	Less absenteeism because breastfed infants are healthier	Lower health care costs	Lower employee turnover, which reduces cost of hiring and training new employees	Higher productivity and loyalty	Positive public image
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State breastfeeding coalitions present another opportunity for Extension partnership. Extension faculty on the New Jersey Breastfeeding Coalition codeveloped criteria for a breastfeeding-friendly workplace recognition award. Criteria include 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 work site wellness can be instrumental in moving the nation forward toward 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 child care providers led to regulatory and practice changes. Extension identified resources to disseminate to work sites 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 3 and 6 months, and breastfeeding at 6 and 12 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, child care, and health care 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, child care licensing agencies and providers, breastfeeding coalitions, and the business community are key collaborators.

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Appendix A

ShapingNJ Child Care Best Practices Toolkit Breastfeeding Fact Sheet (available at
<http://www.state.nj.us/health/fhs/shapingnj/documents/work/publications/>



Breastfeeding



Best Practice Standard

- Facilities shall encourage, provide arrangements for, and support breastfeeding

Background

- Doctors recommend exclusive breastfeeding for about six months followed by continued breastfeeding while complementary foods are introduced during the first year of life or longer if desired.
- Breastfeeding benefits babies by reducing illnesses, doctor's visits, hospitalizations and the risk of obesity.
- Breastfeeding reduces the mother's risk for Type 2 diabetes, breast and ovarian cancers the longer she breastfeeds and lowers her risk of postpartum depression.

Breastfeeding Support is Good for Business

- Breastfeeding mothers are looking for centers that encourage, provide arrangements for, and support breastfeeding.
- Fewer illness among your population! Healthier babies means healthier, happier staff!
- All it takes is a private, clean room (not a bathroom) with an electrical outlet, where mothers can pump their breastmilk. This benefits your employees as well if they are breastfeeding.

How to Store and Feed Breastmilk to Babies

- Breastmilk can be stored in the same refrigerator as other food.
- Bottles of breastmilk must be labeled with the child's name and date milk was pumped. Use oldest milk first.
- Leave refrigerated bottles of breastmilk in the refrigerator until just before feeding.
- Depending on the baby's preference, breastmilk can be served cool, at room temperature or warmed by placing it in a container of warm water—do not heat breastmilk directly in a pan on the stove.
- Avoid heating breastmilk in a microwave oven.
- Breastmilk that has been frozen can be thawed in the refrigerator the night before feeding or can be gradually warmed under cool to warm running water.
- Frozen breastmilk separates into layers. Gently swirl the breastmilk before feeding it to the baby.
- Discard any unused portion of thawed breastmilk that the baby does not drink. Do not refreeze it.
- After feeding, wash the bottle and its parts with soap and hot water before reusing.
- Follow the following chart for guidelines on safe storage times:

Location	Temperature	Storage Time	Comments
Countertop/Table	Room temperature 60°-85°	3-4 hours	Containers should be covered and kept as cool as possible.
Refrigerator	39°	24 hours for previously frozen breastmilk 72 hours for refrigerated breastmilk	Store breastmilk in the back of the refrigerator where temperature is most constant.
Freezer compartment within a refrigerator	5°	2 weeks	Store breastmilk in the back of the freezer where temperature is most constant.
Freezer compartment of a refrigerator that has separate doors	0°	3-6 months	Store breastmilk in the back of the freezer where temperature is most constant.

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Provided by: Michelle F. Brill, MPH

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Appendix B

ShapingNJ Child Care Best Practices Toolkit Breastfeeding Policy Guidance Fact Sheet (available at <http://www.state.nj.us/health/fhs/shapingnj/documents/work/publications>)



Breastfeeding Policy Guidance



Child Care Centers have a responsibility to follow feeding practices that promote optimum nutrition supporting growth and development in infants, toddlers, and children¹

Child Care Centers that Support Breastfeeding and Accommodate the Needs of Breastfeeding Mothers:

- Champion breastfeeding and recognize the health risks to babies and mothers of not breastfeeding
- Include information about breastfeeding in their policies, parent tours and orientation, parent education materials, and staff training
- Provide space for breastfeeding mothers to nurse their babies and/or pump their milk — i.e. a place to wash their hands; a quiet, comfortable place to nurse; a pillow and stool for comfort in positioning; a glass of water, a refrigerator to properly store their pumped breast milk
- Train their staff to properly and safely store, prepare and feed pumped breast milk; to recognize an infant's signs of hunger and fullness; to mimic breastfeeding techniques when feeding bottles of pumped breast milk; to communicate relevant information to mothers about their infant's milk intake; to develop a plan for babies to be ready to nurse when mothers arrive to pick them up at the end of the day
- Maintain a practice of assigning the same caregiver/teacher to feed the same infant daily
- Provide breastfeeding literature, display posters, and refer mothers to available community resources that support breastfeeding
- Demonstrate acceptance of toddler nursing
- Convey to staff that they are doing the best for the babies in their care

¹American Academy of Pediatrics, American Public Health Association, and National Resource Center for Health and Safety in Child Care and Early Education. 2012. *Preventing Childhood Obesity in Early Care and Education Programs Second Edition: Selected Standards from Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, 3rd Edition.* <http://nrckids.org/SPINOFF/PCO/PreventingChildhoodObesity2nd.pdf>

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