

Donor Strategies to Prevent Childhood Obesity:

Start Early (Earlier than you might think)

Early life influences can have a profound effect on children's health and development, including their likelihood of maintaining a healthy weight. A mother's health choices while pregnant are the earliest influences of all, presenting an opportunity to give children a healthy start from the very beginning. Helping pregnant mothers avoid smoking and maintain healthy weight and blood sugar levels during pregnancy can improve fetal nutrition and decrease the likelihood of obesity as the baby grows. Factors after birth can play a role as well. Infants who don't sleep enough or who gain weight too rapidly are at a higher risk of obesity later in life, and breastfed infants may have a lower risk. Programs that support mothers during pregnancy and after birth can take advantage of this critical window for risk reduction, potentially stopping obesity before it starts.⁷

PROMISING APPROACH: Provide support and education to pregnant and new moms through nurse home visitation

Exemplary model: Nurse Family Partnership

The nonprofit Nurse-Family Partnership (NFP) targets low-income mothers pregnant with their first child. Participating mothers are partnered with a registered nurse early in pregnancy, and receive in-home support and guidance through their child's second birthday. Through the NFP model, mothers receive support for key pregnancy behaviors shown to reduce their children's risk for obesity: good nutrition to manage weight and blood sugar, prenatal checkups to ensure that mothers with high blood sugar get appropriate medical treatment, and smoking cessation. After the child's birth, NFP nurses coach parents in providing care for their newborn, infant, and toddler. Coaching can include breastfeeding support and strategies to manage an infant's weight and sleep patterns appropriately, potentially reducing their risk for obesity later in life.

Childhood Obesity Prevention Strategies

Start Early

Increase Access

Enable Healthy Choices

What's the impact?

Since NFP was not originally designed as an obesity prevention program, evidence of the model's direct effect on childhood obesity is still developing. However, the program has demonstrated the ability to change obesity-linked behaviors in pregnant women and new mothers. At one site, participating mothers reduced their smoking by an average of 2.5 cigarettes per day, and increased the percentage of recommended nutrients in their diet by four percentage points.⁸ Participating mothers also demonstrate healthier behaviors after the birth of their children. A 2008 evaluation found that children of participating mothers were 32% less likely to visit an emergency room in their second year of life.⁹ In Pennsylvania in 2012, 65 percent of low-income mothers participating in Nurse-Family Partnership initiated breastfeeding, compared to 42 percent of mothers receiving support from Women, Infants, and Children (WIC), a federal supplemental nutrition program for low-income women with children, a population similar to Nurse-Family Partnership's key demographic.¹⁰

What does it cost to implement?

The costs of providing Nurse-Family Partnership vary by location due to differences in regional cost-of-living. An analysis by the Washington Institute for Public Policy estimated the per-family cost for two-year program delivery in Washington State to be approximately \$9,600 in 2011 dollars.¹¹ NFP is funded through a combination of public and private revenue: as of 2012, philanthropic contributions from foundations and individual donors made up 38% of total funding. These contributions often support capacity building projects, such as data system and reporting improvements, and ongoing program research and evaluation.¹²

Cost-benefit:

Studies have found the program provides an excellent return on investment for society: For every one dollar invested, the program returned \$5.70, providing a net benefit to society of over \$34,148 per high-risk family served. NFP's significant net benefit comes from the positive impacts it has on children, families, and society over time. For example, children whose mothers participate in NFP have shown a 67% reduction in behavioral and intellectual problems at age six, and a 59% reduction in arrests by age fifteen. In addition, the program demonstrated an 83% increase in labor force participation among mothers.¹³

Take action:

NFP's online mapping tool is helpful in locating programs and their local implementing partners. To find other home visitation and outreach programs in your area, contact your local community health center or public health department, which can identify good local nonprofits.

ENABLING FACTORS

In the late 1990s, the Commonwealth of Pennsylvania made a strategic decision to direct funds into research-based programming to provide a comprehensive system of proven prevention and intervention services targeting its most vulnerable citizens. As part of this plan, in 2001 the Commonwealth made a \$20 million, four-year investment to replicate Nurse-Family Partnership. This investment has positioned thousands of Pennsylvanians toward a stronger start in life and may help to explain some of the state's positive progress in reducing childhood obesity.



Image provided by Nurse-Family Partnership.

Below is a list of other organizations implementing our featured approach to “Starting Early.” While we have not analyzed their work in as much detail as the exemplar model, they use similar practices to serve pregnant and new moms.

| Featured Approach | Examples in Greater Philadelphia |
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| Provide support and education to pregnant and new moms through nurse home visitation | <p>Maternity Care Coalition provides community-based home visitation to support and educate pregnant and new moms through their MOM Mobile and Cribs for Kids programs.</p> |
| | <p>Philadelphia Healthy START provides case management, home visiting, and health education to help low-income pregnant women get the care they need to have healthy babies.</p> |

Below is a list of other promising approaches for “Starting Early,” along with examples of organizations implementing these approaches in the Greater Philadelphia region. This list includes organizations whose models are consistent with what we currently understand can work in addressing childhood obesity. All are established nonprofits addressing the issues and capable of accepting philanthropic support.

| Other Promising Approaches | Examples in Greater Philadelphia |
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| Build stronger connections between families and health care professionals who can provide education and resources for healthy development | <p>Healthy Steps for Young Children (Lehigh Valley) in Allentown, PA provides core services for developing infants and toddlers to first-time pregnant women and families.</p> |
| Encourage employers to support and promote breastfeeding | <p>Breastfeeding Friendly Philadelphia is a partnership between Get Healthy Philly and Maternity Care Coalition that helps employers custom-design and implement workplace lactation programs including breaks for breastfeeding mothers, a private lactation space, and a lactation policy that is communicated to all staff.</p> |
| Provide comprehensive nutrition education to preschool students and their families | <p>The Food Trust’s Preschool Initiative provides nutrition education to preschoolers, preschool staff, parents, and caregivers to build healthy lifelong habits and encourage young children to make healthy choices.</p> |
| | <p>St. Mary Medical Center’s Kinder Connection (Bucks County) is a six-week program for children ages 3-5 and their families that teaches healthy eating and encourages physical activity.</p> |

| Other Promising Approaches | Examples in Greater Philadelphia |
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| Advocate for improved health care and resources for low-income mothers | <p><u>Nurse Family Partnership</u>'s model has a proven record of effective outcomes, and uses this research to advocate for preventive interventions through evidence-based public policy.</p> |
| | <p><u>Maternity Care Coalition</u> advocates at the local, state, and federal levels on issues of maternal and child health and early education and care. Maternity Care Coalition also aims to raise community awareness of these issues.</p> |

References

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8 Improving the Delivery of Prenatal Care and Outcomes of Pregnancy: A Randomized Trial of Nurse Home Visitation. David L. Olds, Charles R. Henderson, Jr, Robert Tatelbaum and Robert Chamberlin. Pediatrics 1986;77;16.

9 Barnes, J., Ball, M., Meadows, P., McLeish, J., Belsky, J., & the FNP Implementation Research Team. (2008). Nurse-Family Partnership Programme: First Year Pilot Sites Implementation in England. Institute for the Study of Children, Families and Social Issues. Birkbeck, University of London. Retrieved from <http://dera.ioe.ac.uk/8581/1/dcsf-rw051%20v2.pdf>

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12 Conversation on March 7th, 2014 with Fran Benton, Public Relations Manager for Nurse-Family Partnership's National Service Office.

13 Karoly LA, Kilburn MR, Cannon JS. Early childhood interventions: Proven results, future promise. RAND Corporation, 2005. Available: <http://www.nursefamilypartnership.org/proven-results/Evidence-of-Effectiveness#sthash.YmHDth5E.dpuf>