

Breastfeeding Promotion Research

The ES/WIC Nutrition Education Initiative and Economic Considerations

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Introduction

Breastfeeding is widely believed to be the most beneficial method of feeding for the health and well-being of most infants. And, although breastfeeding is not recommended for all mothers (such as those who use illegal drugs, are receiving cancer chemotherapy, have tested HIV positive), public health experts, such as the American Academy of Pediatrics, the American Dietetic Association, and the Surgeon General, endorse breastfeeding as the preferred infant-feeding method in most cases. Most recently, the American Academy of Pediatrics issued a policy statement recommending that women breastfeed infants throughout the first year of the infants' lives (American Academy of Pediatrics, 1997).

Over the last two decades, research has shown that breastfeeding of infants provides advantages with regard to general health, growth, and development and significantly decreases risk for a large number of acute and chronic diseases. Specifically, there is fairly strong evidence that breastfeeding decreases the incidence and/or severity of diarrhea (Beaudry and others, 1995; Dewey and others, 1995; Howie and others, 1990; Reeves, 1993), respiratory infections (Alho and others, 1990; Beaudry and others, 1995; Howie and others, 1990; Wright and others, 1995), ear infections (Aniansson and others, 1994; Dewey and others, 1995; Duncan and others, 1993; Owen and others, 1993; Paradise and others, 1994), bacterial meningitis (Cochi and others, 1986; Istre and others, 1985), and urinary tract infections (Pisacane and others, 1992).

Breastfeeding may have a protective effect against insulin-dependent diabetes mellitus (Gerstein, 1994; Karjalainen and others, 1992; Mayer and others, 1988), Crohn's disease (Koletzko and others, 1989; Rigas and others, 1993), allergic diseases (Halken and others, 1992; Lucas and others, 1990; Saarinen and

Kajosaari, 1995; Walker, 1985), and certain chronic digestive diseases (Arnold, 1993; Greco and others, 1988; Udall and others, 1985). Breastfeeding may also enhance cognitive development (Lucas and others, 1992; Morrow-Tlucak and others, 1988; Rogan and Gladen, 1993). The health of mothers may also benefit—less postpartum bleeding (American Dietetic Association, 1993; Chua and others, 1994) and less risk of breast cancer (Newcomb and others, 1994; Rosenblatt and Thomas, 1993).

One of the Surgeon General's National Objectives for the Year 2000 is to increase to at least 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period and to increase to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old (U.S. Department of Health and Human Services, 1990). Lower socioeconomic groups have a lower incidence and duration of breastfeeding than higher socioeconomic groups and, thus, remain far from this goal (Abramson, 1992; Martinez and Kreiger, 1985; Ryan and others, 1991; Sciacca and others, 1995; U.S. Department of Agriculture, 1992). Recent data from a 1996 national survey, for example, indicate that women from households with less than \$10,000 household income have breastfeeding initiation and 6-month duration rates of 42 and 12 percent, respectively (Abbott Laboratories, "Ross Mothers Survey," 1996).

In order to meet the Surgeon General's objective of increased breastfeeding, it is important that efforts to promote breastfeeding be directed toward women who are less educated, have lower incomes, and belong to minority groups. Nationally, the U.S. Department of Agriculture (USDA), which oversees the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), has taken many steps to promote breastfeeding, including establishing a Breastfeeding

Promotion Consortium to exchange information and collaborate on breastfeeding promotion activities. USDA recently announced a national campaign by Federal and State WIC programs to promote breastfeeding to WIC mothers and to support all women who choose to breastfeed. The goals of this special effort include encouraging WIC participants to begin and continue breastfeeding, to increase referrals to WIC clinics for breastfeeding support, to increase general public acceptance of and support for breastfeeding, and to provide support and technical assistance to WIC professionals in promoting breastfeeding. Ten pilot States were selected to initiate the campaign and receive technical assistance.

Strategies, then, to increase the initiation and duration of breastfeeding may be an important influence on the health of infants born to low-income women. The success of efforts to improve breastfeeding among low-income women has been inconsistent. Some studies indicate that the initiation of and duration of breastfeeding can be increased through education of pregnant women (for example, Johnson and others, 1984; Kistin and others, 1994; Saunders and Carroll, 1988; Sciacca and others, 1995). Other studies, however, show that educating women can be effective in increasing knowledge, but ineffective by itself in increasing the initiation or duration of breastfeeding (for example, Grossman and others, 1990; Kaplowitz and Olson, 1983; Kelley, 1983). A unique USDA interagency project, the ES/WIC Nutrition Education Initiative, has provided some evidence on what factors may contribute to increased initiation and duration of breastfeeding.

The ES/WIC Nutrition Education Initiative

The Department's WIC program serves as an adjunct to health care. It provides supplemental food, nutrition and health education, and referrals to other health and social services to low-income pregnant, postpartum nonbreastfeeding and breastfeeding women, and infants and children up to age 5 whose family income is at or below established income eligibility standards and who are found to be at nutritional risk. Recognizing the importance of local-level service coordination in meeting nutrition objectives, USDA funded community-based education projects in fiscal year 1993 designed to promote the nutritional health of the neediest WIC Program participants. Under the auspices of the ES/WIC Nutrition Education Initiative, 17 States were competitively awarded funds over a 3-year period for the

development, delivery, and evaluation of innovative nutrition education projects. A total of 18 projects were operated at the State level through the Cooperative Extension System (CES), with funds administered at the Federal level by the Cooperative State Research, Education, and Extension Service (CSREES).^{1,2}

The Economic Research Service (ERS) was asked to assist CSREES in the evaluation of these projects. This report is part of a larger evaluation effort by ERS, which included advice and technical assistance to the projects and Federal-level staff.

The Initiative was conceived as a way to combine the strengths of two nutrition programs aimed at the low-income population—WIC and the Cooperative Extension System's Expanded Food and Nutrition Education Program (EFNEP). Particularly important are WIC's resource of health professionals, access to a large at-risk low-income population, and successful combination of food assistance and nutrition education and EFNEP's intensive educational efforts carried out by paraprofessionals. EFNEP delivers experiential nutrition education to low-income homemakers through paraprofessional aides in a planned curriculum delivered over the course of several months. By emphasizing local flexibility, this Initiative allowed projects to design educational programs tailored to the specific needs of high-risk groups in each of the participating States.

One of the primary objectives of this Initiative was to promote interagency cooperation between WIC and Extension projects because cooperation between the two agencies at the local level was vital to strengthening referral networks and improving program efficiency. All 18 projects had project advisory committees with both WIC and Extension representatives.

A key element of this Initiative was targeting the neediest of WIC participants. The neediest population was defined as those who—as a result of such factors as geographic isolation, age, education, poverty, cultural background, or language—lack the skills, knowledge, and abilities to achieve a nutritious diet and a healthy lifestyle for themselves and their families.

¹One of the States, North Carolina, operated two projects—a breastfeeding promotion project and a pregnant adolescent project.

²The Initiative was originally administered by the Extension Service (ES), which has been reorganized into CSREES; thus, the Initiative was originally designated as the ES/WIC Initiative and retains that designation. A multiagency team, known as the ES/WIC Implementation Team, provided advice and support to the Initiative and was composed of members from CSREES, the Food and Nutrition Service (FNS), and the Economic Research Service (ERS).